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NORTH CAROLINA

Medical Journal

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THIS ISSUE: Medical Education and Community Needs for Medical Care, Robert H. Ebert, M.D.; Medical Research Potential in Ambulatory Care, Edward H. Kass, M.D., Ph.D.; Something is Happening on Our College Campuses, Lakeyist, M.D.; The Anatomy of a Solo Pediatric Practice in a Small Town, Dan P. Boyette, Jr., M.D.



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IF MORE MEN CRIED



At least seventy-five out of one hundred adults with duodenal ulcers are men.¹

Why? It may be significant that duodenal ulcer patients tend to crave recognition and are "especially vulnerable to threats to their manly assertive independence."²

Hypersecretion—an atavistic response. Stewart Wolf, who, with Harold G. Wolff, studied the personalities of duodenal ulcer patients, wonders if masculine competitiveness is related to "an atavistic urge to devour an adversary." It is striking, he reports, that an accentuation of gastric acid secretion and motility can be "induced in ulcer patients by discussions that arouse feelings of inadequacy, frustration and resentment."²

By chance? A lean, hungry lot. Was the link between emotions and gastric hyperacidity acquired through mutation to serve a purpose? During man's jungle period of evolution, the investigator points out, a male dealt with a foe by killing and devouring it. "It may be more than coincidence," he concludes, that peptic ulcer patients appear to be "a lean, hungry, competitive lot."³

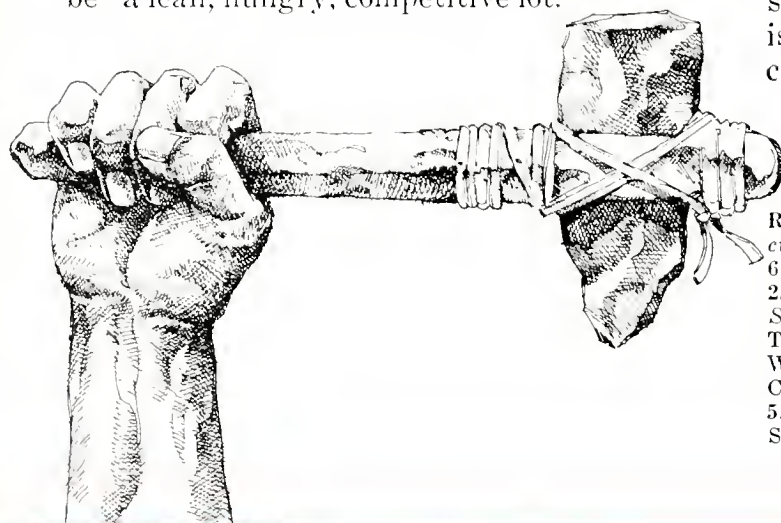
Big boys don't cry. If more men cried maybe fewer would wind up with duodenal ulcers. But men will be men—the sum total of their genes and what they are taught. Schottstetter observes that when a mother admonishes a son who has hurt himself that big boys don't cry, she is teaching him stoicism.⁴ Crying is a negation of everything that society thinks of as manly. A boy starts defending his manhood at an early age.



Take away stress, you can take away symptoms.

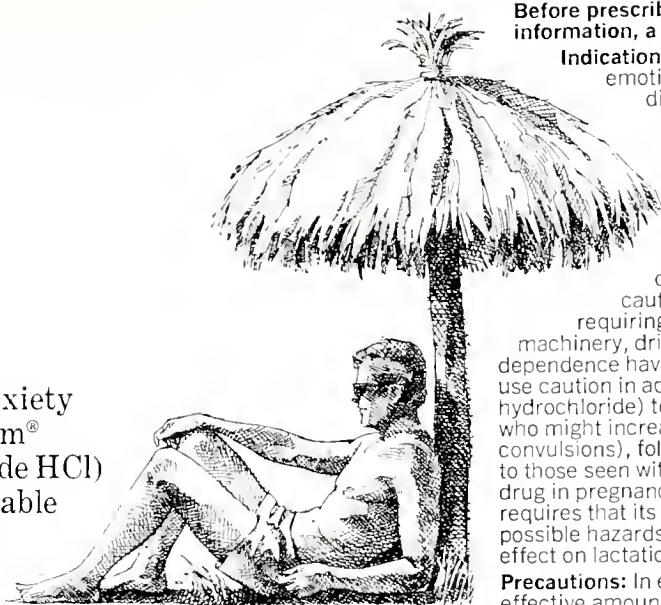
There is no question that stress plays a role in the etiology of duodenal ulcers. Alvarez⁵ observes that many a man with an ulcer loses his symptoms the day he shuts the office and starts out on a vacation. The problem is, the type of man likely to have an ulcer is the type least likely to take vacations or take it easy at work.

The rest cure vs. the two-way action of Librax.[®] For most patients, the rest cure is as unrealistic as it is desirable. Still, stress is a factor that must be dealt with. And it is here where the dual action of adjunctive Librax can help. Librax is the only drug that can



References: 1. Silen, W.: "Peptic Ulcer," in Wintrobe, M. et al. (eds.): *Harrison's Principles of Internal Medicine*, 6, New York, McGraw-Hill Book Company, 1970, p. 68. 2. Wolf, S., and Goodell, H. (eds.): *Harold G. W. Stress and Disease*, ed. 2, Springfield, Ill., Charles C. Thomas, 1968, pp. 68-69. 3. *Ibid.*, p. 257. 4. Schottstetter, W. W.: *Psychophysiologic Approach in Medical Practice*, Chicago, Ill., The Year Book Publishers, Inc., 1960, p. 10. 5. Alvarez, W. C.: *The Neuroses*, Philadelphia, Pa., W. B. Saunders Company, 1951, p. 384.

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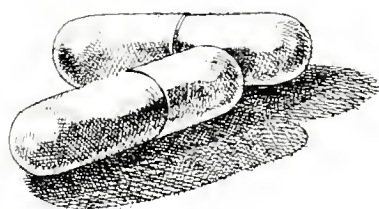


Protects man from his own hungry personality. The action of Librium reduces anxiety—helps protect the vulnerable patient from the psychological overreaction to stress that clutches his stomach. At the same time, the action of Quarzan helps quiet the hyperactive gut, decreasing hypermotility and hypersecretion.

An inner healing environment with 1 or 2 capsules, 3 or 4 times daily. Of course, there's more to the treatment of duodenal ulcer than a prescription for Librax. The patient—with your guidance—will have to adjust to a different pattern of living if treatment is to succeed. During this adjustment period, 1 or 2 capsules of Librax 3 or 4 times daily can help establish a desirable environment for healing.

Librax: It can't change man's nature. But it can usually make it easier for men to cope with the discomfort of stress—both psychic and gastric—that can precipitate and exacerbate duodenal ulcer.

Librax: Rx #60 1 cap. *a.c.* and 2 *h.s.*



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, over-sedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

in the treatment of
duodenal ulcer
adjunctive
Librax®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

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When you prescribed Orinase[®] (tolbutamide, Upjohn) 14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated fetotoxic and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures necessary for optimal control with insulin are also necessary with Orinase. The patient on Orinase must be fully instructed: about the nature of his disease; how to prevent and detect complications; how to control his condition; not to neglect dietary restrictions; develop a careless attitude or disregard instructions relative to body weight, exercise, personal hygiene, and avoidance of infection; how to recognize and counteract impending hypoglycemia; how and when to test for glycosuria and ketonuria; how to use insulin; and to report to the physician immediately if he does not feel as well as usual.

Caution, very close observation, and careful adjustment of dose are necessary when: insulin is withdrawn during the trial period in order to avoid ketosis, acidosis, and coma; thiazide diuretics are administered which may result in aggravation of diabetic state and increased tolbutamide requirement, temporary loss of control, or even secondary failure; treating patients with impaired hepatic and/or renal function and debilitated, malnourished, or semistarved patients in order to avoid severe hypoglycemia which may require corrective therapy over several days; and treating patients with severe trauma, infection, or surgical procedures where temporary return to insulin or addition of insulin may be necessary. Response to tolbutamide is diminished in patients receiving therapy with beta blocking agents.

As some diabetics are not suitable candidates, it is essential that the physician familiarize himself with the indications, limits of application, and selection of patients for therapy.

Patients must be under continuous medical supervision, and during the initial test period should communicate with the physi-

Today you have your own.

If you're around 40 or 45, you've probably had quite a bit of clinical experience with Orinase.

Maybe as much as 14 years.

And that means you know quite a bit about it.

On the one hand, you know that diet and weight control are the initial and essential foundations for the management of adult-onset, non-ketotic diabetes. When these measures prove satisfactory, no additional therapy is indicated. On the other hand, you know that if these measures fail the addition

of Orinase to the regimen can often help lower blood sugar. Orinase lowers blood sugar as effectively today as it did when you first prescribed it.

You also know the importance of close monitoring of the patient. Although uncommon, severe hypoglycemia may occur if the dosage is not tailored to suit his requirements.

In short, Orinase is a drug you're familiar with, and probably have confidence in.

And that may be the best recommendation Orinase can have.

Orinase[®] 0.5 g. tablets (tolbutamide, Upjohn)

...ian daily, and during the first month report at least once weekly
...or physical examination and definitive evaluation. After a month,
...aminations are recommended monthly or as indicated. Ap-
...pearance of ketonuria, increase in glycosuria, unsatisfactory
...lowering or persistent elevation of blood sugar, or failure to
...tain and hold clinical improvement indicate nonresponsiveness
...to Orinase (tolbutamide). Orinase does not obviate need for
...maintaining standard diet regulation. Uncooperative patients
...should be considered unsuitable for therapy. Prescriptions should
...be refilled only on specific instruction of physician. In treating
...mild asymptomatic diabetic patients with abnormal glucose
...tolerance, glucose tolerance tests should be obtained at three-
...to six-month intervals. Orinase is not an oral insulin or a substitute
...for insulin and must not be used as sole therapy in juvenile
...diabetes or in diabetes complicated by acidosis or coma where
...insulin is indispensable.

If phenformin is prescribed in combination with Orinase, appropriate package literature should be consulted.

Adverse Reactions: Severe hypoglycemia, though uncommon, may occur and may mimic acute neurologic disorders such as cerebral thrombosis. Certain factors such as hepatic and renal disease, malnutrition, advanced age, alcohol ingestion, and adrenal and pituitary insufficiency may predispose to hypoglycemia and certain drugs such as insulin, phenformin, sulfonamides, oxyphenbutazone, salicylates, probenecid, monamine oxidase inhibitors, phenylbutazone, bishydroxycoumarin, and phenylhydrazide may prolong or enhance the action of Orinase and increase risk of hypoglycemia. Orinase long-term therapy has been reported to cause reduction in RAI uptake without pro-

ducing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity; crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

Supplied: 0.5 g. Tablets—bottles of 50, 200, 500, and 1,000, and cartons of 100 in foil strips.

For additional product information, see your Upjohn representative or consult the package insert.

The Upjohn Company, Kalamazoo, Michigan 49001

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Medical Research Potential in Ambulatory Care—
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The Anatomy of a Solo Pediatric Practice in a Small Town—
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Old winner, new bottle.



DBI® phenformin HCl
tablets of 25 mg.
DBI-TD® phenformin HCl
capsules of 50 and 100 mg.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.

Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoglycemia.

Warnings: Use during pregnancy is to be avoided.

Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria

which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**

2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.

3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.

Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake. (B)98-146-103-C

For complete details, including dosage, please see full prescribing information.

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A gratifying announcement about Empirin[®] Compound with Codeine



You may now specify up to five refills within six months when you prescribe Empirin Compound with Codeine (unless restricted by state law).

It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. 1/2. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3 1/2, phenacetin gr. 2 1/2, caffeine gr. 1/2.

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60 - 64*	112.50	251.00	273.50

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Under 40	\$ 19.50	\$ 43.00	\$ 57.00
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800	80.00	112.00	160.00	256.00
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In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®

(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask delay the symptoms of incubating syphilis. Patients should carefully examine and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia. During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin.

Trobicin®

sterile spectinomycin dihydrochloride
pentahydrate, Upjohn
single-dose intramuscular treatment

High cure rate: * 96% of 571 males, 95% of 294 females

(dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Effective against most strains of *Neisseria gonorrhoeae* in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluable and were not included.

JA72 1848-6

hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 2 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: Vials, 2 and 4 grams—with ampoule of Bacterio-

satic Water for Injection with Benzyl Alcohol 0.9% w/v. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.

Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.

For additional product information, see your Upjohn representative or consult the package insert.

MED-B-1-S (LWB)

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	250.00	124.50	142.00	204.50	284.50	352.00
	200.00	100.50	114.50	164.50	228.50	282.50
PLAN L-65 (Long Term) Lifetime Accident Benefits; Sickness Benefits from inception to Age 65 (2 years 65 to 70)	Weekly Income	Under 30	30-39	40-49	50-59	60-69
	\$300.00	\$184.50	\$211.50	\$289.50	\$388.50	\$421.50
	250.00	154.50	177.00	242.00	324.50	352.00
	200.00	124.50	142.50	194.50	260.50	282.50

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It's working, even when she's not.



10:30 p.m. To bed with tablets or suspension. Either dosage form of Gantanol® (sulfamethoxazole) provides reliable therapy for nonobstructed cystitis.

The convenient *b.i.d.* schedule lets the patient rest assured — while Gantanol fights the infection.

1:30 a.m. Antibacterial blood and urine levels build fast.

Peak therapeutic effectiveness starts within 2 to 3 hours of the initial dose.

In addition, Gantanol diffuses readily into interstitial fluids for antibacterial activity at the foci of the infection.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants

less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, i.e., rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient indi-



4:30 a.m. Effective through the night. Each dose of Gantanol (sulfamethoxazole) delivers up to 12 hours of antibacterial action against susceptible

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in nonobstructed urinary tract infections

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Tablets/Suspension

12 hours of therapy with every dose



viduals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (aceta-

zolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

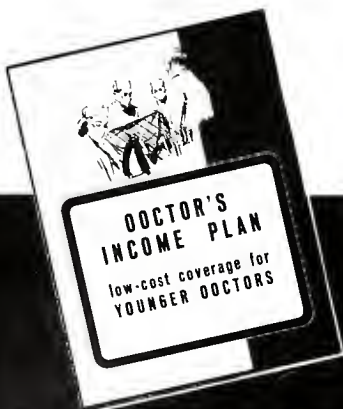
Supplied: Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.



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FROM
THE NEW
USV



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range:

Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections.

In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic:

Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



Infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be

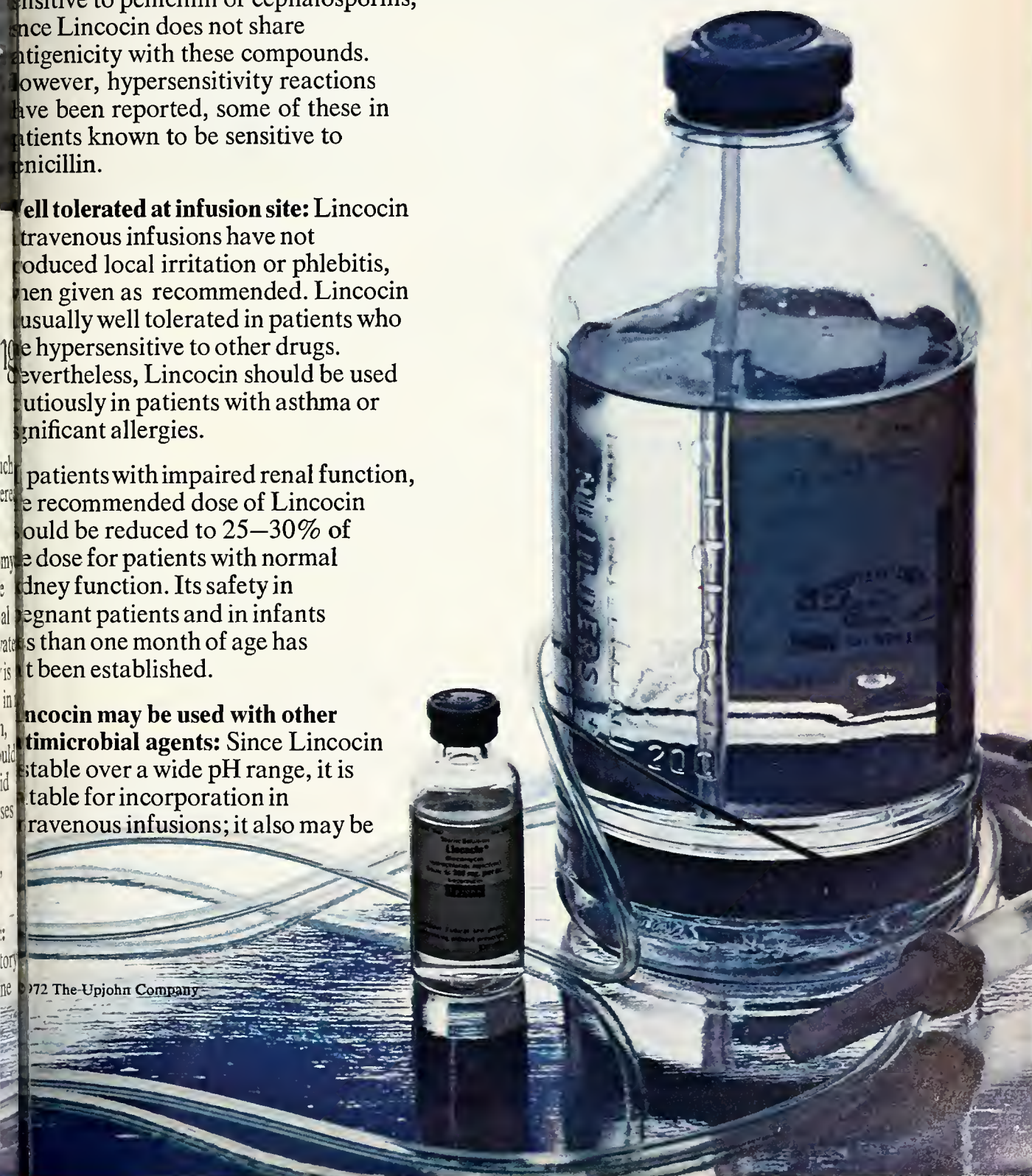
administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.





Sterile Solution (300 mg. per ml.)

Lincocin[®]

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for
hospitalized patients with life-threatening infections.
Lincocin is effective in infections due to
susceptible strains of streptococci, pneumococci,
and staphylococci. As with all antibiotics,
in vitro susceptibility studies should be performed.

Each
preparation
contains:

	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg
*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.	

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS

BEEN REPORTED FOLLOWING PARENTERAL THERAPY. A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimicrobial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β -hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-

mines available for emergency treatment. *Skin and mucous membranes*—Skin rash, urticaria, vaginitis, and rare instances of foliata and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid; administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in distilled water or normal saline has produced local irritation or phlebitis.

HOW SUPPLIED: 250 mg and 500 mg Capsules—bottles of 24 and 100. *Sterile Solution*, 300 mg per ml—2 and 10 ml vials and 2 ml syringe. *Syrup*, 250 mg per 5 ml—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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PRESIDENT'S NEWSLETTER

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

8

January 4, 1971

Department of Social Services has rescinded cancellation of contract with North Carolina Blue Cross - Blue Shield, Inc. and will negotiate a one-year contract with the corporation to act as fiscal intermediary for Medicaid.

Charles A. Hoffman, President-Elect AMA will speak at the annual meeting of the State Medical Society Monday, May 22, 1972.

Richard S. Wilbur, Assistant Secretary of Defense, indicated reduction of up to 40% of military physician manpower (from 14,600 to 10,000) end of 1972. Defense Department instructed services to increase productivity of military physicians.

U. S. Senate approved three-year 142 million dollar program to combat sickle cell anemia, disease afflicting 2.5 million in U. S.

AMA House of Delegates Reference Committee at the Clinical Convention, Orleans, indicated that reduction in spending past year resulted in increased budget and that "it does not appear there will be dues increase in ... near future."

Reye's Syndrome - Lancet - 2: 749-752, October 12, 1963 - "Encephalopathy and Fatty Degeneration of the Viscera" reported in 8 cases in North Carolina in October - November, 1971. Five children died. Syndrome associated with chickenpox, type B influenza, other viruses. Usually respiratory infection followed by irritability, vomiting, coma with high LDH, and blood ammonia levels.

Four thousand five hundred twenty two drivers were charged with driving under the influence (DUI) arrested by State Highway Patrol and 11 law enforcement agencies October, 1971. Breathalyzer available 9.5% arrested due to wide distribution of the apparatus. State Medical Society supported the statute on advised consent.

Twenty one member Committee on Health Service Industry recommended President's Price Commission approved 2½% limitation on physician increases, but only if justified by costs increase. Thus physicians and health care workers are singled out for control by regulation not applied to other providers of service out of the health care field. The limitation is both discriminatory and cumbersome, and may be impossible to apply to one's office and other outpatient practice.

Department of Health, Education and Welfare announced 3.5% increase Medicare premium paid by 20 million people beginning July 1, 1972.

This is a change from \$5.60 to \$5.80 a month matched by the federal government totalling \$50 million increase in fiscal 1972.

Lenox D. Baker, M. D., Professor Emeritus Orthopedic Surgery, Duke University Medical Center and past president of the Medical Society was sworn in as Secretary of the newly formed Department of Human Resources. The Society extends best wishes for a productive term of office.

American Heart Association speakers cautioned against overenthusiastic acceptance of saphenous vein bypass graft for occluded arteries. William Glenn, M. D., AHA President, said there was no evidence as yet that the operation prevents myocardial infarction or prolongs life.

AMA at Clinical Meeting in New Orleans adopted resolution to reaffirm merits of individual private practice for providing quality care at reasonable cost and called on AMA to emphasize in negotiations for delivering medical care that inclusion should be made for voluntary self-discipline, freedom of choice, noninterference by third parties, and physicians' right to private practice and to choose his method of contracting for services.

Requested Board of Trustees to submit report at 1972 annual convention on problems of medical information from hospital record departments to insurance companies, service contract corporations, and government.

Recommended monthly journal on medical socioeconomics and referred to Board of Trustees for its guidance in developing the proposed journal.

Recommended that the AMA encourage international employment of uniform definitions, registration requirements, and reporting practices for li birth and fetal deaths. That the attention of the problems of nomenclature in fetal mortality be referred to the U. S. representatives of the World Health Organization in order to develop uniform international system of reporting. (As it stands now, it is difficult and inaccurate to compare birth statistics of different governments).

"Medical Care As A Right: A Refutation", Robert M. Sade, M. D., of Children's Hospital Medical Center, Boston, Mass., New England Journal December 2, 1971, p. 1288, discusses thoroughly the issue of the right medical care and its relation to other various and so called rights. article is highly recommended. According to Franz Ingelfinger, M. D., Editor of the New England Journal, many letters have been received, so favorable and some unfavorable. There is no doubt that this article will stir up considerable discussion. Permission has been obtained for reproduction in the Headquarters Office from the author and from the Journal and copies may be had on request.

In significant decision National Labor Relations Board exempted non-profit hospitals from provisions of the Labor Relations Act. Petition had been filed before the Board seeking a union election for the Duke University Medical Center but the petition was declined.

Best Wishes, Happy New Year, and

Sincerely yours,

Charles W. Styron

Charles W. Styron, M. D.
President

CAMPBELL'S SOUPS IN DIABETIC DIETS*

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* These recommendations are based on a *one cup portion* when prepared according to directions on the label. If milk is used in the preparation, use part of your daily requirement.

Exchange Substitution for 1 Bread and 1/2 Fat

Tomato
Tomato, Bisque of
Tomato Rice, Old Fashioned

Exchange Substitution for 1/2 Bread and 1/2 Fat

Asparagus, Cream of

Exchange Substitution for 1 Meat and 1 1/2 Bread

Hot Dog Bean
Split Pea with Ham

Exchange Substitution for 1/4 Meat and 1/2 Bread

Chicken Gumbo
Chicken Noodle

Campbell's Soups are appetizing and enjoyable and, because of the many varieties available, offer your diabetic patients the opportunity to plan and enjoy more interesting and appealing meals.

*To obtain copies of "Recommendations for Placing Campbell's Soups Into Exchange Lists," suitable for distribution to patients, write to Campbell Soup Company, Dept. 500, Campbell Place, Camden, N.J. 08101.



here's a soup
for almost every patient and diet
for every meal
and, it's made by ***Campbell***

When diarrhea wrings the wedding belle...

It's all very well to counsel patience in diarrhea patients. There are times when relief of symptoms can't come too soon.

X-ray studies¹ in 16 normal subjects showed just how promptly the active ingredient in Lomotil does its work.

Lomotil retarded gastrointestinal motility particularly during the first three hours after administration. It continued its moderating action on the bowel for at least three hours more.

Physicians prescribe Lomotil more often than any other drug when the urgency for the control of diarrhea is most distressing.

1. Pémeulennere, L.: *Acta. n. du. R 1132 sur le transit gastro-intestinal*, *Acta gastr. ent. Belg.* 21:874-880 (Sept.-Oct.) 1956.

Lomotil[®]

TABLETS/LIQUID

Each tablet and each 5 cc. of liquid contain:

Diphenoxylate hydrochloride . . . 2.5 mg.

(Warning: may be habit-forming)

Atropine sulfate 0.025 mg.

Saves the Day



Warnings: Lomotil should be used with caution in patients taking barbiturates and, if not contraindicated, in patients with cirrhosis, advanced liver disease or impaired liver function.

Precautions: Lomotil is classified as a Schedule V substance by Federal Law with theoretically possible addictive potential at high dosage; this is not ordinarily a clinical problem. Use Lomotil with considerable caution in patients receiving sedating drugs. Recommended dosage:



should not be exceeded, and medication should be kept out of reach of children. Signs of accidental overdosage may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia; continuous observation is necessary. The subtherapeutic amount of atropine sulfate is added to discourage deliberate overdosage.

Adverse Reactions: Side effects reported with Lomotil therapy include nausea, sedation, dizziness, vomiting,

pruritus, restlessness, abdominal discomfort, headache, angioneurotic edema, giant urticaria, lethargy, anorexia, numbness of the extremities, atropine effects, swelling of the gums, euphoria, depression and malaise.

Overdosage: The medication should be kept out of reach of children since accidental overdosage may cause severe, even fatal, respiratory depression.

Dosage: The recommended average initial daily dosages, given in divided doses until diarrhea is controlled, are as follows:

Children:

3-6 mo.... ½ tsp.* t.i.d. (3 mg.)
6-12 mo.... ½ tsp. q.i.d. (4 mg.)
1-2 yr.... ½ tsp. 5 times daily (5 mg.)
2-5 yr.... 1 tsp. t.i.d. (6 mg.)
5-6 yr.... 1 tsp. q.i.d. (4 mg.)
6-12 yr.... 1 tsp. 5 times daily (10 mg.)
Adults.... 2 tsp. 5 times daily (20 mg.)
or 2 tablets q.i.d.

*Dissolve in 4 cc. per teaspoonful.

Use of Lomotil is not recommended in infants less than 3 months of age.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

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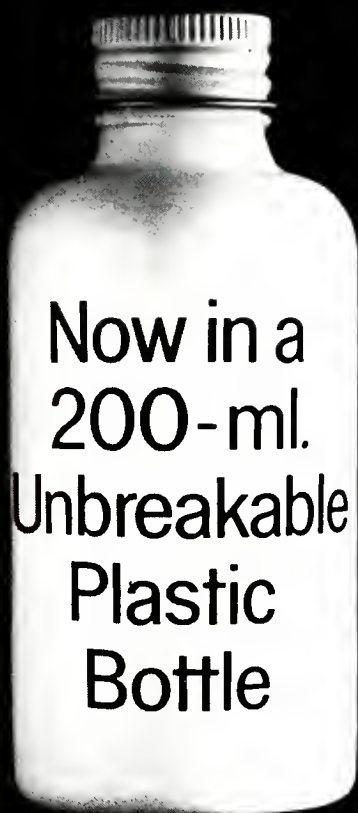
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Medical Education and Community Needs For Medical Care

Robert H. Ebert, M.D.*

MY general thesis here is that medical education should try to anticipate the future of medical care, and not simply reproduce the past. Predicting the future is a hazardous business, but it is possible, I think, to identify some of the problems which confront medicine today, and, knowing some of the present trends in science and technology, it is reasonable to anticipate how some of these problems may be solved. The conflict between what might be called technocracy and politics is one of the reasons why prediction is so uncertain. More on this later.

The problems of the medical care system have been talked about and written about almost to the saturation point for the past five years, but still it may be helpful to review briefly some of the issues in order to identify some potential solutions. *Fortune* devoted a good part of its January 1970 issue to our ailing medical system. Both CBS and NBC have broadcast recent documentary programs concerning the crisis in medical care. Clearly, this is an area of major public concern.

The traditional model of our care system included such features as the presence of a family physician for everybody who could afford one, referral to a specialist for those problems the family physician could not deal with (a relatively small part of medical care), and the use of the hospital for those illnesses that could not be given care of either in the home or in the physician's office. Until recently, it was also generally accepted that

there were two classes of medical care, one for the private patient who paid and the other for the charity patient or ward patient who made up the major part of the teaching services in most hospitals.

The situation today, of course, is familiar to all of us—medical care is no longer considered a privilege; it is stated as a right. And today we can draw on the remarkable increase in scientific knowledge and medical technology of the last 20 to 30 years and do a great deal more for a patient than was thought possible two or three decades ago. Specialization has increased remarkably. This trend is often blamed for today's problems, but is simply a result of the increase in knowledge—more than any one physician could possibly learn. Thus we have seen the disappearance of the general practitioner, or rather, the gradual attrition of his ranks. He is not replaced. If one looks at almost any part of the country, the general practitioner is among the older age group of physicians; fewer and fewer medical students are going into general practice in its traditional sense.

Another characteristic of the current scene is a significant maldistribution of physicians in terms of the needs of the country. This is most apparent in the extremely large urban settings and in isolated rural areas. Physicians have tended to congregate in the intermediate zones where the middle class chiefly lives. All these factors have combined to influence a breakdown of the system on which we have relied, and relied on effectively, for a good many years.

The cost of medical care is today a very real matter of national concern. Twenty years ago the cost of medical care amounted to about 4.5 percent of the gross

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national product, but now it has been estimated to be in the neighborhood of 6.8 percent, with a total expenditure of about \$63 billion, which is a very large amount of money—even compared with the budget of the Department of Defense. About 38 percent of this money is spent for hospital care, about 20 percent for doctors' services, and about 11 percent for drugs. To compare with other countries, Britain spends about 5 percent of her gross national product on medical care, and Sweden about 4 percent. Now why do we spend 6.8 percent and accomplish so relatively little, in terms of what we could do for the total population?

The medical care system of the United States has been called a nonsystem; it has been called a cottage industry, and it has been called a great many other things. It is not really surprising that our costs have become inflated, for it should be expected in any system which is characterized by the individual entrepreneur working in an industry which has become increasingly technological, in which the demand far exceeds the supply, and in which prices are set on a cost-plus basis. This situation is complicated by an over-utilization of hospitals and the fact of too few physicians in some parts of the country and too many in other parts. A further complication was illustrated in a recent article in the *New England Journal of Medicine*, which showed that there are about twice as many surgeons per capita in the United States as compared with Great Britain, and also that almost twice as much surgery is done here.¹ It is hard to believe that all of that is necessary.

What we have in this country is a piecemeal system in which each part is separately financed, some parts in a highly profitable fashion; other parts run at a significant loss. Hospitals are overutilized; many needs are unmet. I think it is apparent that we are going to have to do something to correct this situation, and we are going to have to do it reasonably soon if the system is not to break down entirely.

FUTURE TRENDS

Now let me turn my attention to some of the trends which I think are going to affect the future of medicine, the future of medical care, and the future of medical education.

Technological trends

Dr. Stanley J. Reiser of our faculty has been engaged in an interesting study of technology and medicine.² He comes to this task with a background of medicine, with a doctorate in the history of science, and with some experience in the Kennedy School of Government, and he makes a point that I believe to be of the greatest importance if one is to anticipate the future. It is his thesis that the physician will ultimately always use the methods that provide him with the most accurate information in preference to those that provide a vaguer kind of information.

He begins by looking at the use of the stethoscope, and noting how significantly the approach of the physi-

cian to the patient changed, once that kind of instrument was introduced. As the physician began to correlate his findings with the results which could be seen from the autopsy table, he became much more preoccupied with what he could hear and interpret on the basis of his own direct observations, and placed far less reliance on the general appearance of the patient, or even what the patient told him. With the development of one of the major steps in medical technology, the x-ray, there was a further refinement in obtaining very direct information about the patient, in preference to information which was not that direct. Reiser suggests that the development of technology and its use by the physician may have been the origin of the criticism that the physician is really more interested in the disease than in the patient. Actually, the average practitioner was probably not more interested in the disease than the patient—the concern was with obtaining more information which would interpret for him, or would allow him to interpret, what disease was present, and what treatment would be effective.

Reiser also suggests that any further refinement in the way that information is obtained will probably be accepted by the physician for the reasons that I have noted, yet may have the secondary effect of appearing to produce a further alienation between the doctor and the patient. This is an important point, because it may be that our problems with the so-called doctor-patient relationship are related more to technology than they are to attitudes of the physician.

Let us look for a moment at some of the more modern developments in technology, which already have had an impact on medicine, on the way that medicine is practiced.

One of the best examples, I think, is an automated laboratory, which if it is not already in existence, will be soon. It exemplifies how one approach to certain kinds of medical practice may be modified, if not completely changed, by the technology itself. It wasn't very long ago that most of us were told that the laboratory was being overused, that very frequently medical students and residents were ordered to make unnecessary tests, a practice which was unrealistic, or simply added to the cost of medical care without contributing anything of value. Using technology now available, however, it is possible to do multiple determinations with little increment in cost. It is possible to do 15 to 18 or 20 determinations on a single sample of blood, for example, and the interesting thing is that it is probably cheaper to do all of them at once than separately later because the cost of labor, of drawing the blood, and getting it to the laboratory and getting it back, is undoubtedly more than simply running the whole set of determinations.

It also seems feasible, with the present technology to make certain kinds of correlations on the basis of laboratory tests which were not possible before, but which are now possible because the data base can be significantly enlarged. New kinds of routine screening are now possible.

Another implication for the future practice of medicine is that a large-scale operation with a large laboratory, at least with centralized management, is far more efficient and effective than multiple small laboratories. This doesn't mean, however, that laboratories cannot be decentralized, but it does mean that they ought to be interconnected.

Technology is also revolutionizing information retrieval. The computer has been called a lot of names; some people have criticized it, while, on the other hand, others have maintained that it is going to solve all of our problems. Usually it is forgotten that the computer is simply a very convenient tool for storing information and for retrieving it much more efficiently and effectively than can be done by the human mind, and that is all it is. But that is pretty important after all, and it has only begun to develop. For example, the Bell Laboratories have developed the so-called *magnetic bubble*, which is about the size of a drinking glass, which can store and retrieve millions of pieces of information, a device that could revolutionize how one uses retrievable information.

The point here is that it is now possible, even with the present methods, to devise data banks which would store and make available data on patients, wherever located, to anyone qualified to receive it—with the result that the same data that were developed, say at the Ambulatory Patient Care Center in Chapel Hill, North Carolina, could be used by someone in a world community. A telephone is all, really, that one would need. And because the data are always available, no matter where the person is, it is possible to decentralize care. Clearly, if data were collected, stored, and retrieved in this way, it would significantly reduce the manpower now necessary to perform these functions.

The computer can also aid in diagnosis, and probably will be used in the future simply because of its unique ability to remember and to make correlations, as long as it is so programmed. It is evident today that all of the electrocardiograms taken in the state of North Carolina could be quite easily read in this fashion, and interpreted. Diagnostic trees are now being developed for more sophisticated kinds of diagnosis. This methodology, still very much in its infancy, seems quite likely to have future use in increasing the productivity of the physician.

We will also see a change in the kind of information collected. Dr. David D. Rutstein of Harvard,³ did a study a number of years back to find out how physicians made diagnoses. He used as his model the occurrence of chest pain, tracing the number of steps required before an accurate diagnosis could be made. I won't go into the details of the study except to mention one significant point demonstrated—namely, that sooner or later every patient who complained of chest pain received an x-ray of the chest. Thus, one can ask the question: If an x-ray is going to be a part of every examination for chest pain, and is one of the things that is going to be needed for correlation, why not do it routinely? In other words, the knowledge that certain

kinds of information are going to be necessary might drastically change the ways in which information is collected.

Computer-aided treatment is another phenomenon currently in its infancy. To use one example of the explorations currently under way, there is a large city on the West Coast where all the symmetry for the radiotherapists is done by a group of physicists, people who have a good deal of experience in this general area. They get the information via a terminal, and send it back to the office of the physician. This centralized accumulation of information, and transmittal back to the physician, now becomes quite possible with the technology at hand.

A use of the computer, which may or may not have a future, is in the ordering of drugs. It is possible to program in such a way that automatic corrections can be made for mistakes in dosages, for drugs which are incompatible, and for drugs which are misspelled, and therefore may be misinterpreted by the nurse. One can build in a kind of censoring of a drug order which is not possible now.

Manpower trends

Another clearly evident trend is the significant increase in the use of technicians and of professionals other than physicians. If one looks at the numbers, there have been much more striking increases in nonphysician professionals and other health workers than there have been in physicians.

A number of significant manpower experiments are going on. Certainly, the one at Duke University for the development of physician assistants has been watched with considerable interest by people all over the country, and it has become quite apparent that physician assistants can be trained to do highly technical work. How much they will be able to do, and how well they will be trained in the somewhat more complex area of primary care, are now in the process of exploration. Nonetheless, it is clear that many of the things now done by the physician can be done by people with less complex educations, and not only can be done well, but often can be done better than by the physician himself.

I was speaking recently with a professor of radiology at the University of Indiana, who feels that the GI series is now pretty well "programmed" as to what is necessary. He decided to see whether his technicians could do the GI series, a procedure that he did not particularly like to do himself. He did train the technicians, and they have produced a quantity of films which are every bit as good as those taken by a physician. Furthermore, instead of having a resident prepare for an intravenous pyelogram, he has trained the technicians to do it, with the result that the residents spend much more time with the patients and are much more watchful of the complications following the intravenous injection of dye. This incidence of complications has been reduced since this change was made.

Now, as I say, these are areas which are relatively

straightforward and simple, but it is perfectly clear that as one goes forward in the future, more and more different people are going to be used for many of the tasks which in the past were done by the physician. Anesthesiology, for example, having made strenuous efforts to eliminate nurse anesthetists, is now trying to find other kinds of people who can perform the same kind of role. A number of manpower experiments have been made, including some new roles for the pharmacist. Certainly, coronary care units are already basically under the supervision of the nurse and others who are trained in this area. The physician does not spend all of his time there.

Another relevant trend is the development of educational technology. It seems unlikely to me that new technology in education is going to have any very immediate impact, at least any large-scale impact, on education in universities, and certainly not in professional schools. I do not think it has had very much impact as yet in primary and secondary education, but it is beginning to have a very significant effect in certain industries in the training of people, for example, who have to repair or consult about highly technical instruments which keep changing and evolving.

It is likely that this kind of technology may have special application in the training of people who do some technical tasks in medicine, because these are often finite and can be well programmed. In such situations, technology as it applies to education can be tried out and fostered, and it can be seen where it works and where it does not work.

Regionalization trends

It is quite evident today, and becoming more so to the public, that a part of the increase of medical care cost is attributable to the duplication of facilities in multiple institutions. This is not just a matter of a capital cost or the cost of setting up a facility. It is the cost of running it and the inefficiency of under-utilization of a facility. Too often the care is not as good as it should be. For example, surgical units that fall below a certain level of use are inefficient, and the surgery is not very good. Radiotherapy, if done on a very small scale, is inefficient and costly.

Not only for reasons of cost, but also for reasons of quality care, it will probably be necessary to regionalize both facilities and their use. However, there is as yet little real incentive to plan regionally, because of the manner in which hospitals are financed. They are reimbursed largely on the basis of what it costs them, and there is very little reason for them to say, "Well, we cannot do this, because it can be done better somewhere else." As a result of the Regional Medical Programs and the Comprehensive Health Planning Act, concern is building, but it is unlikely that much will be done until there is some very real financial incentive for regional planning.

Ambulatory care trends

There continues to be an increasing emphasis on the vertical patient. This is partly a result of the enormous escalation of hospital costs and the realization that much more care can be given on an ambulatory basis than is now the case. Certainly, the idea of comprehensive care is relevant here. Also significant is the general awareness today of the kind of savings which can be accomplished within prepaid comprehensive health care. The Kaiser-Permanente Plan illustrates one new pattern which can be remarkably successful in providing high quality care, and total care, at lower cost to society. There are other plans, and growing interest in such plans is developing in universities, partly because a different kind of environment for teaching is becoming necessary from that which is associated only with the university hospital.

Clearly a potential ultimately exists for modern technology to help in the process of decentralization. To date, everything has tended to focus diagnostic and treatment functions in the medical center; physicians have tended to locate their offices close to the center and to use it almost to the exclusion of facilities in the community. In this way care has followed the technology. Now, I think that the process could be reversed. If it is agreed that a significant amount of care should be provided outside of the medical center—in the community—then it is possible to use modern technology, modern communications, and modern transportation to solve at least a part of this problem. The civilian practice of medicine has lagged behind the military in this regard. It is interesting, incidentally, to note that in Vietnam the battalion surgeon has disappeared because casualties can be removed from combat areas by helicopter so efficiently and so effectively that a first-line surgeon is not needed. Yet this same kind of imaginative approach to transportation has not been employed in solving our own problems at home.

CONSTRAINTS ON REALIZATION OF POTENTIAL

The comments set forth above are clearly not all of the trends influencing the present and future practice of medicine, but now let me turn to some of the political and social constraints which are going to modify how we use our new tools in our new settings.

First of all, I would say that one of the constraints will be the feelings of professionalism in any group that is involved with providing health. Most physicians will probably immediately react to any dicta as to how they practice; in other words, they are likely to oppose, at first, any kind of regional planning which says, in effect, "You can't do something at this hospital because it is going to be done better somewhere else." Other professions in the health area are equally conservative, and their resistance to change is going to have an important effect on what eventually happens.

Secondly, there is a growing opposition to technology among groups of highly educated people. It is interest-

ing that the computer and the data bank have become particular targets of the New Left, and that the common targets in universities for some of the more radical students are computer centers and data banks. It is as though technology itself were the villain, rather than how it is used. Clearly, technology and science are completely neutral; our concern should be the uses to which they are put. Still, a kind of hostility is evident, I think, even with the more moderate students, who voice a quite thoughtful concern about the right of privacy versus the data bank. What happens, for example, if the data are used by someone who should not have access to the data bank? That is probably not such a difficult problem that it cannot be solved, but there is another concern: What do we do about misinformation that gets into the data bank? What do we do about a diagnosis of coronary artery disease, or tuberculosis, which turns out to be wrong? Anyone with experience at the receiving end of bills processed by computer, knows that it is almost impossible to correct an error. There is a very real fear that such trends, propagated to their logical extreme, will make us truly the victims of our own technology. There will continue to be a very cautious resistance in many parts of society.

Another constraint to rapid change is the possibility that consumer participation in the development and operation of health service facilities may lead to demands for absolute control. I believe we may see substantial conflict between the nation's need to plan health on a relatively large scale and citizen demands for community control, because the two are superficially, at least, rather incompatible. It may be, however, that this can be solved by allowing community control of more input at a local level, in a well-defined part of the system, but clearly not in the whole system, which serves a much larger community. It is, for example, not rational to allow the local communities surrounding one new clinic to control its program, if it is also serving a large part of an entire state.

Still another area of controversy is the doctor-patient relationship. As I noted previously, each advance in technology seems to remove the physician one step further from the patient, and the complaint is growing that the doctor doesn't care about the patient. There is, as well, a question of how well the patient is going to respond to the delegation of tasks to people other than the physician. These questions are further important examples of potential social constraints, factors that relate more to the sociology of medicine than they do to the technology or science of medicine.

Finally, there are forces on the political scene that must be considered. I think it will be interesting to speculate on what impact future legislation will have on society and on the health professions.

Let me present two brief scenarios of what the impact might be of two different approaches to legislation providing national health insurance. I believe we will have national health insurance some time, let us say, in the next six to eight years. This is likely because national health insurance is, in a way, among the more

apolitical things that any administration can support, since it does not have anything to do with current issues of race, city versus rural, etc. It does not really have anything to do with a difference of opinion of political parties. The American Medical Association (AMA) opposition to it, I would suppose, would not be as great as it was to Medicare; it is evident that the medical profession has not suffered from Part B of Medicare.

If the form of national health insurance that is enacted preserves in its totality the fee-for-service system and the present financing of all aspects of medical care, then I think one can predict that immediately there will be further inflation of costs, an even greater demand for service than there is today (which will be partly unmet), and no particular impact on the manner of distribution of physicians and of health services. If this scenario is followed, I would think that soon there might be a fairly violent reaction against the medical profession, focusing on the way in which services are delivered. Then the climate would be ideal for nationalization of medical care in this country, for the system would then have broken down.

If, on the other hand, legislation were to incorporate an incentive for comprehensive care, and if it encourages the competitive creation of different systems for supplying services, and if it places a premium upon efficient use of manpower—with incentives for savings by using people other than physicians and by the greater use of technology—then I think we would have a quite different and more desirable situation.

My only comment to those physicians who are concerned about ultimate nationalization is that the worst thing they can do is to try to preserve *in toto* the present financing system of medical care, because I think that would lead to an almost inevitable disaster. The other plan, with its creation of incentives, might lead to a much happier outcome for all.

TRENDS IN MEDICAL EDUCATION

Let me turn now to the philosophy behind our present system of medical education, and what I consider to be its impact. We have lived through what all of us recognize as the Flexner era of medical education. It began in 1910 with publication of his report.⁴ We then began to see the abolition of the proprietary school and the trend toward associating medical schools more closely with universities, with the consequent development of a full-time faculty, particularly in the basic sciences. Ultimately this led to a reduction in the number of schools and a reduction in the number of physicians produced, but it also led to a significant improvement in the quality of the graduates.

Although all of the reforms Flexner advocated did not come to pass, his report had perhaps more impact than any comparable report that has ever been made in this country, because it resulted in much closer associations between medical schools and universities. It is interesting, however, that a certain separation was almost always maintained. The medical school was never really completely absorbed into the university.

Certainly the basic sciences were strengthened, and university hospitals developed full-time faculties. During the several decades following World War II, the United States Government, through the support mechanisms of the National Institutes of Health (NIH), really brought the Flexner era to final fruition. Those decades saw generous support for research and research training, and great accomplishments were made in the development of new knowledge, both basic and clinical.

At this point in time, the medical schools face some significant dilemmas because of where the Flexner-era philosophy has brought us. The biological sciences, which for a long time were a kind of private preserve of medical education and the medical schools, have now become just as much the preserve of the whole university. The biological sciences have become the most interesting area of science, and one finds physicists, mathematicians, chemists, a whole variety of people, turning their attention to biological problems. Biology is no longer the monopoly of the medical school.

Many dilemmas arise. What, for example, will be the future role of the basic sciences in the medical school? Can a university afford two departments of biochemistry, as is true in some institutions, or will biochemistry become essentially an undergraduate subject? And what about clinical education? The university hospital has, in many instances, become first and foremost a specialized hospital. Thus, it is less ideal for the teaching of medical students (at least with respect to inpatients) than it is for the teaching of residents and fellows.

One might also ask whether today's four years of medical school are really in the right proportion and in the right place. It is difficult to see the rationale for this structure now, because the basic sciences relate to the university, and the clinical experience relates to the continuing education of the physician through the internship and residency.

During the postwar years, with the growth of science and technology and the disappearance of the old-time general practitioner, increasing concern was expressed about the depersonalization of medical care. In attempts to solve this problem, there was a good deal of emphasis on the whole patient, on the continuity of care, on the development of a primary physician as a substitute for the disappearing general practitioner. What was missing from these attempts was adequate attention to the system of delivering medical care and to the need to care for an entire population as well as for individual patients. One might almost say this matter became an issue between public health and private health. Certainly, until very recently, medical schools have paid little attention to the public aspect of care, not feeling they really had much responsibility for the care of a total community.

It seems to me that the Flexner period was one of development—the discovery of scientific knowledge, the invention of new technology, and the application of that new technology and that new knowledge for the benefit of individual patients. The most serious prob-

lem today is the inadequate diffusion of that knowledge and the services that go with it, to whole populations. We in medical education must give serious attention to this problem. University medical centers, for example, must be actively engaged in the development of complete, large-scale models of care. The community must become part of the educational environment. The medical student must have access to and understanding of complete systems of medical care, and not simply bits and pieces.

Now, what kind of education and training experience does the medical student need? Clearly, he continues to need both a scientific basis (including the behavioral sciences) and a continuing understanding of health and disease. He certainly needs some understanding of the society in which he lives, so that he has an appreciation of the societal forces which affect the way he will practice; he needs to know something about the cultural differences of our society, and how these affect the manner in which medical care is viewed and how it is accepted. He has to have some understanding of modern technology and some feeling for the present as well as the future potential uses—and limitations—of technology. The future physician is going to be dependent for his effectiveness on other people, and he has to learn how to work with them. In a sense, he requires some understanding of the problems of management, because he is likely to be working with larger groups of people than he ever did before.

The medical student has to have enough experience with all parts of the health system so that he can understand how it works and how he can exercise choice about where he wishes to work. Hospitals, of course, are an important part of the system. But he needs exposure not only to specialty care, but also to primary care — this for the purpose of really learning something about primary care systems, which does not mean viewing them as a kind of substitute for care in the hospital.

How should medical education be structured in order to provide the appropriate experiences? It seems to me that the academic portion may very well become more and more a part of the university experience. As I indicated earlier, many of the kinds of skills that are needed today in medicine come from the university itself, not from the medical school as a separate entity and putting part of the necessary medical education experience even further into the hands of the university, I think, would be desirable. The biological sciences, the behavioral sciences, and the social sciences all are really a part of that kind of academic experience. There is no particular reason why most of the academic bases of medicine, including the so-called basic sciences, should not be part of the undergraduate education.

The medical center might then represent the other "half" of medical education, including training in the various specialties of medicine and in primary care. The medical center would be affiliated with the university, but it also might be affiliated with a variety of

other institutions, including such educational institutions as community colleges and vocational schools. It will probably be necessary also to affiliate very closely with other kinds of health institutions, including nursing homes and small hospitals in other localities. In this variety of settings the student would acquire his clinical skills, his experience in working directly with other members of the health team, and his knowledge of different parts of the health system, so that he would have some understanding and some practical experience in the problems of management.

The construction of a new kind of medical center would probably start with the premise that it provide a framework for complete care of at least some part of the population. This might be either in an urban or rural area, or it might be in both, but total responsibility for defined population groups is required. Opportunity must be provided for working with all health professionals in community settings. Now, this new concept of a medical center is bound to affect specialized hospital care, which might well become separate from primary hospital care, for the reason that much medical care requires hospitalization but does not require all of the complexities of the specialized hospital. And certainly we must provide ambulatory care of two kinds, both specialized and primary. We must assume responsibility for preventive care, which by and large is in-

adequately carried out in the existing medical care system.

In such ways, this new kind of medical center might provide a much more useful bridge between the university and communities. The center would relate to the university, but not be dominated by it, and it would relate to the interests of a particular community or communities, but would not be totally controlled by these communities. It would have as a primary mission the diffusion of medical care without sacrificing the development of new knowledge and advances in therapy. It would serve the community more directly and more completely, because by doing so it would create a far better educational environment for the physician, for the nurse, for the physician assistant, and for the variety of others who will contribute in the future to the health of this nation. Certainly the construction of the J. Spencer Love Clinics and the Ambulatory Patient Care Center at the University of North Carolina at Chapel Hill is a significant step in these new directions.

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When any person has been bitten by a dog, the strictest inquiry ought to be made, whether the animal was really mad. Many disagreeable consequences arise from neglecting to ascertain this point. Some people have lived in continual anxiety for many years, because they had been bitten by a dog which they believed to be mad; but as he had been killed on the spot, it was impossible to ascertain the fact. This should induce us, instead of killing a dog the moment he has bitten any person, to do all in our power to keep him alive, at least till we can be certain whether he be mad or not.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 332.*

Medical Research Potential in Ambulatory Care

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RESEARCH WITHIN THE CONTEXT OF CONTEMPORARY SOCIETY

WE have gone through a period of development in medical investigation in this country that is unmatched in the history of man. Never before have funds been given so generously for research in biology, medicine, and related fields as they have been given by the American people during the past 20 years. This generosity was compounded of many things, not the least of which was that we could afford it. An important component of generosity is enlightened selfishness, which, I think we would all agree, is a reasonable basis for giving. We were casting our bread upon the waters, and we expected not only that we would get it back after many days, but also, of course, that we would find it filled with roast beef.

As medical scientists, we pleaded our case for more funds by stressing the value of the many medical discoveries, such as the discovery of antibiotics, and by indicating the great decline in deaths from a variety of diseases, mostly infectious diseases, modestly ascribing this decline to our earnest efforts, and more or less discreetly indicating that the reward for our efforts should be more support so that we could continue our good work.

Now, there is nothing basically wrong with this scenario. It is not necessary that socially constructive ends be reached only by totally disinterested people; in fact, it is not clear how much would happen if there

were not a combination of material reward and social motivation in our daily activities. Where the scenario became distorted was in some of our assumptions and in some of our failures.

The problem of wrong assumptions

We saw that the grants system, as applied to academic medicine without modifications, was putting emphasis on research to the extent of imbalancing our other social obligations, such as teaching and the provision of medical care, so that to a certain extent disdain for the latter obligations became a common counterpart to the excessive emphasis on the first. Academic leaders were prominent in voicing the need for more systematic support for teaching and for medical care and many representations were made to the Congress and elsewhere concerning these needs. However, we were not especially effective in getting the system of funding to change, and it is at least possible that this lack of effectiveness had an element of reluctance to rock the boat too far, as well as the conviction that in the long run, research would provide easier and more efficient ways to deliver medical care and teaching. Once again, these were not so much misguided or reprehensible points of view, as they were failures to move with the changing awareness of political planners.

It took the competing pressures of the Vietnam War to bring on the day of reckoning and lead to a national policy of reexamination of the objectives and allocation inherent in the financial structure of the medical academic establishment. Now, I have no sympathy with the unplanned, unstructured, and virtually chaotic way in which the reckoning is being conducted, and I think the reckoning will, by nature of the way it is being conducted, destroy a great deal without necessarily selecting those things that should be preserved.

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but it is my conviction that the day of reckoning would have come some time soon, in any event, and that we probably would not have been particularly better prepared for it even without the problems of Southeast Asia. We were like Mike, falling from the top of a skyscraper and receiving solace from all the Pats distributed at each floor who shouted out that everything was all right so far.

Why were we heading for the basement? First, we had accepted some half-truths and considered them to be the whole truth. The principal half-truths were that medical research had stamped out killers such as tuberculosis, lobar pneumonia, and whooping cough, or would soon do so, and that medical research had been a principal factor in extending life expectancy. These are half-truths, as is known—but not well known.

The data on deaths from tuberculosis show that such deaths began to decline during the middle of the nineteenth century and continued to decline in almost linear fashion in the major economically developed countries during the following hundred years. There were increases in rates of tuberculosis during wars and under specified, local, adverse conditions; the poor and the crowded always came off worst of all in war and in peace. But, overall, deaths from tuberculosis did decline, and this decline was not altered measurably by the discovery of the tubercle bacillus, the advent of the tuberculin test, the appearance of BCG vaccination, the widespread use of mass screening, the intensive antituberculosis campaigns, or the discovery of streptomycin. Only the advent of isoniazid changed the mortality patterns, and by then the rate of tuberculosis had fallen to but a small fraction of its levels one hundred years earlier.¹

It is important that this point be understood in its completeness. It was made years ago, and has been repeatedly stressed by many observers of the public health.^{2, 3} Our research efforts in dealing with tuberculosis have been of great value in the management of individual patients and in the interests of public health, but research does not account for the linear decline in deaths during the past hundred years.

There have been similar mortality trends with respect to diphtheria, scarlet fever, whooping cough, and enteric fever, to name but a few; and I suspect that similar trends have also occurred with respect to carcinoma of the cervix, toxemia of pregnancy, and perhaps hypertension and certain other disorders. This decline in death rates from certain disorders, correlated roughly with improving socioeconomic circumstances, is merely the most important happening in the history of the health of man.

We have only the vaguest and most general notions about how it happened, by what mechanisms socioeconomic improvement and decreased rates of certain diseases run in parallel. Is improved nutrition the crucial feature, which seems to me one of the weaker possibilities, although currently fashionable? Is it decreased crowding or decreased numbers of people per

bedroom? Is it a secular change in virulence of certain microorganisms? Is it not startling that almost no relevant information is addressed to the most remarkable phenomenon in the history of health? Why is there not more information which, in turn, might be used in places that still are afflicted with high death rates from these disorders? These facts are taught in most institutions devoted to medicine and to public health, but all too often they are taught by only one or two small voices whose reedy lines of credibility are overcome by the weight of surrounding opinion.

Otherwise able investigators, dedicated to the search for truth in their chosen fields, become like the farmer who saw the giraffe and said that there could not possibly be such an animal. Some of my most redoubtable colleagues have stated to me that the data on the decline of communicable disease, and the lack of impact of specific discoveries on these declines, are either incorrect or unacceptable. Such individuals, despite their intellectual attainments, have not allowed their opinions to be unduly influenced by the facts.

What I am suggesting is that medical scientists, like other individuals, are subject to the cultural and social pressures of their time. The failure of the medical scientist to face the implications of broad generalizations such as the ones just presented, the failure of certain journalists to print information "because it presents a negative image about research that readers don't like," the failure of responsible figures in the public service to face effectively the possible implications of such findings—all these betray the possibility that the image and the medium may be the message even in the halls of academe, and that what seems to be politically expedient may become the gospel even for the dedicated seeker of the truth. Let me give an example of how this may work.

At present, there is great national concern over the fact that this country is not among the world leaders in low rates of infant mortality and of prematurity. It is recognized that prematurity and infant mortality are socioeconomically linked. It is therefore concluded that because the poor have limited access to proper prenatal care the provision of such care will lower the rate of infant mortality. What people do not like to face is a hard analysis of the assumptions behind this program. The most important assumption is that obstetricians know how to prevent most infant mortality and most prematurity, but lack only a social medium for delivering this knowledge. In fact, however, only about 10 to 15 percent of prematurity and infant mortality is at present preventable in terms of what is now known and can be delivered by the best of obstetrical care.

Leading obstetrical institutions report that rates of infant mortality and of prematurity have been essentially unchanged during the past 35 years, yet during this time knowledge of antibiotics, antihypertensives, diuretics, the role of Rh factor, and a host of other medical advances have become known or have begun to be used on a large scale. Therefore, the application of the best of obstetrical care with all modern improve-

ments has had little detectable effect on outcome. Let us look at it another way. What happened in the nineteenth century, before contemporary progress?

In that century the infant mortality rate for the royal families of Europe was only 12 per 1,000, a rate no country in the world enjoys at present—the Scandinavian countries run around 16, and in this country we are in the range of 23 deaths per 1,000 deliveries.⁴ The concurrent rate of infant mortality during the nineteenth century in the population at large was several hundred per thousand. Clearly, rich is better.

This extraordinarily favorable rate of infant mortality for royalty occurred before any of the major medical advances that we now herald. The common man might ascribe this to access to the obstetricians of the time, but we know better.

I wish to make my position quite clear, because it can easily be misinterpreted. I am for motherhood and for prenatal care. I do not believe it is socially, fiscally, or morally sound to deny to certain segments of our population the right to enjoy one of life's few creative experiences with comfort, dignity, and access to whatever is known that will diminish even slightly the unhappy consequences that may occur. I do believe, however, that we owe it to the public and to the representatives of the public to state without slogans, and without warping the truth, how little we really know about preventing the catastrophes of childbirth as they now occur, and how little likelihood there is that the present program will change the statistics in any important way.

Only systematic study pursued in carefully designed and scientifically sound ways can possibly dispel our ignorance. It seems to me wise and appropriate for an informed public to mount large social programs on the basis of eminently desirable objectives that seem to relate to social justice and to have values other than those reflected in the statistics of prematurity. Spending our money in such a way would appear to be at least as desirable as the building of roads that go nowhere, or of missiles that are obsolete before they are finished.

The role of the scientific community must be to inform the public of the facts as they are, and not as we would like them to be. If the splendid new facility, the Ambulatory Patient Care Center at the University of North Carolina at Chapel Hill, will undertake systematic studies of, for example, the role of prenatal nutrition, environmental stress, presence of occult infection, and several other variables that have been identified as problem areas in the field of preventive obstetrics, and will do this in the expected framework of delivering sound prenatal care and of training others to carry on in the delivery of such care, this facility will have served its function to the utmost. If it will avoid the national practice of fragmenting care so that prenatal clinics are handled in one way, child care in another, care of the elderly in still another, and care of the working adult population in still another, this facility will permit us to carry the view, however illusory, that we can sometimes act rationally.

The problem of competing priorities

Since there is nothing startling about the observation or ambitions that I have listed, why the current fuss? The chief source of concern among academic leaders is the increasing realization that the rising demand for medical care, taken in the framework of competing priorities, is leading the budgetary managers to use time-honored weapon of government for dealing with major political problems. More money is being steered into medical care, and since the supply available for health is limited, less is left for research. The concern is entirely understandable since 70 to 80 percent of medical education is financed through this precarious source, the federal government. Worry that the size of the academic staff may need to be reduced is not the major problem, for it is freely admitted that we could if the problem were presented to us rationally and systematically, achieve a reduction in staff—although perhaps at the cost of some of our present activities. The greater concern in the academic world is that the thrust toward increasing involvement and medical care will reduce research activity and thereby cripple our progress in the future. This problem is real and requires the most serious attention. It is compounded of many ingredients, and I shall select but a few for further discussion.

First, there is the problem of priorities and the allocation of funds for these priorities. During our halcyon days, it was not appropriate to worry about the future. As a consequence, almost no large-scale work has been done in helping legislators to arrive at rational guidelines for allocating money in the health field. It may not be late; we are no longer completely reliable witnesses on the basis of past performance. However, if we are to spend next year over \$70 billion in health, what is a reasonable percentage that should be put aside for research and development (which would, of course, include education for medical, paramedical, and other related personnel)? Large and progressive industries spend anywhere from 10 to 25 percent on research and development. This should suggest that some \$7 billion to \$18 billion should be set aside for research and development in medicine and related fields.

What percentage should go into the different segments of the educational process, what into applied research, what into directed areas of priority, what into wholly undirected research? How many of us, viewing the problem with concern, are attempting to fix and to defend general guidelines of this sort so that some sense of perspective can be transmitted to legislators, budget planners, and others who must make decisions with or without our assistance?

Another ingredient of the concern over reduced research activity centers on questions about university roles. What is the role of the university in the expanding process of medical care, and how can the university's role in teaching and in the expansion of knowledge be maintained and fortified in the face of these newer demands? One aspect of this problem is the feeling that the involvement in the community will necessari-

weaken the other roles of the university. This is a legitimate fear, but it is not necessarily the case that involvement in community health activities will be weakening.

About 50 or 60 years ago, universities were asked to become involved in hospital functions. Serious observers at the time were gravely concerned that it was not possible to perform effective investigation in a clinical setting. It was widely held that university involvement with hospitals would weaken scholarship and academic objectivity; it was feared that the day-to-day demands would inevitably take precedence over deeper thought. Many institutions and many individuals still share these views, but on the whole it has been demonstrated not only that, with appropriate adjustments, the university and the hospital may strengthen one another, but also that certain forms of knowledge about disease simply cannot be obtained in any setting other than the clinical investigative one. The contribution of the teaching hospital has been so great in defining new areas of biological knowledge that it is not necessary to recount the major directions in biology and medicine that have come from this source—and that could not, in all likelihood, have emerged from any other source. The clinical investigator studies disease as it occurs in the hospital or clinic and uses available biological tools to elucidate his sense of observation and experimentation.

Today, what is the potential of university involvement in community health activities for a comparable fruitfulness? It would seem self-evident that, apart from the delivery of care and the extension of teaching activities, the unique role of community health activities in the investigative process must be to provide us with knowledge that can be obtained only from the study of large populations. The opportunities here seem to me very promising indeed.

RESEARCH WITHIN THE AMBULATORY CARE SETTING

In an ambulatory care setting, there are manifest opportunities for research in the delivery of health services and the development of new patterns, new personnel utilization, new economies and efficiencies. This is the kind of action-oriented experimentation being fostered by the Health Services Research Centers, including the one at the University of North Carolina at Chapel Hill, directed by Dr. Cecil G. Sheps.

There are also other kinds of research opportunities within the ambulatory care setting. Questions of the utmost importance to our understanding of disease can be explored here. Perhaps these will be the most interesting to the large numbers of highly skilled clinical investigators who would like to blend their research ability with their clinical competence, and with their urge to perform duties that are immediately identifiable as being socially relevant on a scale larger than can be obtained in a teaching hospital.

The study of chronic disease and hypertension

Before citing a few specific examples, let me make a few observations to heighten awareness of our needs

for new knowledge. The progress of the past 100 years has been largely directed toward acute disease and acute complications of chronic disease; this is understandable. Our teaching of medicine has reflected this emphasis, so that students are taught that history-taking and physical examination, backed up by suitable laboratory work, are the essence of diagnosis. However, at present, in this country, about 85 percent of deaths and a similar proportion of admissions to large general hospitals are for chronic disease or for acute complications of chronic disease.

Cardiovascular, malignant, psychiatric, and chronic infectious diseases, and a variety of chronic disorders of unknown etiology, constitute the major medical problems of our time. The destitution of our present position in these areas of disease can be summed up with a simple question: "In which chronic disease have we useful, operational, preventive programs that can be presented to the public health authorities for action? There is very little. If ever there were a case for research support, it is with respect to our capacity to prevent chronic disease, because, contrary to what is commonly thought to be the case, we do not know as much as we would like and have learned less than we had hoped.

Chronic disease begins insidiously. Most individuals with a chronic disease do not know it until a clinically recognizable complication appears. All too often, by the time a history and physical examination are diagnostic, irreversible changes such as infarction or hemorrhage will have appeared, and we are doomed to expensive, palliative treatment with limited results.

In the early stages of a chronic disease, a history and physical examination are not very useful. If we were to go house-to-house to find people at risk with respect to any given chronic disease and were to ask each householder how he feels, the answer would probably be "fine." According to our teaching, the next question should then be "when did it start?" It becomes essential to develop a new medicine, based upon detection of populations at risk or upon individuals at risk, using objective devices such as laboratory or instrumental aids that will detect the incipient stage of a chronic disease at a time when intervention may be genuinely useful. The classical techniques, invaluable in the hospital or clinic, are less useful as preventive methods.

In only a few chronic diseases are we even close to attaining the ideal of developing tools that may lower rates of chronic disease. In hypertension, in chronic infections of the urinary tract, in chronic bronchitis, to name but a few, there are some hopeful and suggestive possibilities. It may be worth looking at some of these in detail, to see what the research approaches may be.

Hypertension occurs in 10 to 15 percent of our adult population, and certain drugs not only lower blood pressure, but also have been shown in carefully conducted, but small, clinical trials to reduce significantly the rate of coronary disease, stroke, and other cardiovascular morbidity. For example, in the important study

by Freis and associates,⁵ a number of hospitals in the Veterans Administration collaborated in detecting hypertensive males.

Patients were studied intensively and many were excluded from the trials, sometimes because some readings fell below 90 mm, sometimes because for geographic, social, or medical reasons it seemed unlikely that the patients would adhere to the treatment, and occasionally for other reasons. Because of this selection, less than half of the patients who entered the trial were eligible for the treatment as planned. Similarly, Tibblin and Bengtsson,⁶ in Gothenburg, chose a random sample of males and offered treatment to all hypertensives. Although only about half of the patients offered treatment took it, those who did seemed to undergo a significant decrease in morbidity due to cardiovascular illness, particularly stroke.

Although there have been a few such studies, the weight of experience to date deals with severe hypertension, and in the case of hypertension that is mild or borderline, many questions remain. The drugs that are used to control blood pressure are like any other group of drugs in having their own patterns of toxicity and hypersensitivity. Rashes, fevers, hyperuricemia, depression, dizziness, loss of potency, hyperglycemia, hematological disorders, and many other reactions have been related to these drugs. In severe hypertension, the risk of a disease is great, and the benefits of lowering blood pressure are of such magnitude that a certain risk of toxicity is generally acceptable, although constant supervision of the patient is at present essential. However, there is disagreement among experts concerning how closely the patients must be followed, which biochemical studies are needed, and what are the precise indications for cessation of treatment. Therefore, in those with lower levels of blood pressure, where the risks of excess morbidity are not as great and the benefits of lowering the pressure still further are less striking, it is decidedly unclear when the risk of treatment will offset the benefits.

It is possible that milder forms of hypertension can be treated more simply and thus minimize toxicity. It can also be hoped that the secular trend in hypertension, whereby an elevated blood pressure rises still higher with time, may be reversed by simple treatment given when the degree of elevation is mild, thus providing substantial long-term gain at relatively low toxicity. However, these are conjectures; only well designed studies can provide definitive answers.

Similarly, investigation is needed into ways of seeking out hypertension, for it is now well understood that the search for hypertension cannot be conducted only in offices or clinics. Large segments of a population do not visit physicians regularly. Few, if any, major public health procedures have been successful without substantial educational or legal efforts that installed these benefits. There are no clear estimates of what increased loads might come from determined efforts to seek out all hypertensives through doctors' offices, even if such an approach gave any likelihood of being successful.

Even under such an unlikely plan, there are unsolved problems of detail. The methods of measuring blood pressure and the best ways of providing treatment for elevated blood pressure are far from standardized. Few, if any, experts in the field view with pleasure the consistency with which hypertensives are managed in the offices of most practitioners. Even agreement on the measurement of blood pressure is far from reality, and innumerable observations have been made to show how great is the degree of variation among physicians asked to determine blood pressure in given patients. Perhaps better instrumentation will help to solve the problem of observer variation, although it is noteworthy that for all its spectacular accomplishments, the space program has still not come up with an entirely satisfactory device for measuring and recording blood pressure in astronauts.

One critical problem that must be explored is that of patient cooperation. If determined efforts in clinic and hospital settings, advanced by dedicated and competent physicians, still leave us with half of the patients who are offered treatment not accepting it, the effectiveness of a detection and treatment program is prohibitively restricted. We must know more about the reasons for noncooperation and the social, psychological, and other factors that interplay to affect the efficiency of a major preventive program in chronic disease.

Different types of mass-screening programs, more simplified approaches to treatment, clinics that meet at more convenient hours, wider use of paramedical personnel, and many similar possibilities need controlled study. We do not need all the answers before major national programs are undertaken, but pilot programs attacking the problems can provide some answers. Only after actual procedures have been developed that are successful in detection and treatment does it become possible to determine cost-benefit relations and to ask if such programs are worth the effort and expense. To argue about these matters at this embryonic stage in the development of approaches to the problems would seem to be pointless. Thorough and careful study would seem to be the only answer.

There may be benefits from such programs beyond those related to specific disease states. We are agreed that new methods for delivery of health care are desperately needed. There is suggestive evidence that availability of mass screening will lower the demand for traditional methods of care. Precisely how such screening does so and the degree to which it may be effective over the long run are still unclear. It is conceivable, however, that searching systematically for hypertension and for a few other treatable chronic diseases will have the added benefit of lowering overall demand for health care services. Certainly a network of detection and treatment centers for a certain number of selected chronic diseases would provide potential bases for expanding such programs as new knowledge is developed.

In such settings quite fundamental problems remain to be investigated. It is customary, for example, to begin discussions of hypertension with the statement, used

much as a protective amulet, that secondary hypertension should be sought and eliminated. Coarctation of the aorta, pheochromocytoma, hyperaldosteronism, renovascular disease, chronic glomerulonephritis, and other disorders are proven causes of secondary hypertension. The rates at which these conditions occur in the general population is unknown, but low. Which of these should be sought systematically?

How many individuals with secondary causes of hypertension will respond to antihypertensive treatment so that specific detection may become unnecessary for optimal survival and comfort of the patient? How much radiological, urological, and biochemical capability are needed in a community to provide a useful program for detection and treatment of hypertension? What is the surgical demand that a given number of hypertensives will make on the resources of a community? Should each hypertensive patient receive a complete diagnostic work-up in the way that is being taught to medical students, with considerable cost of time, money, and facilities? Or is there a simpler approach sufficiently safe to justify itself?

Strong opinions concerning the answers to these questions can be readily elicited at any medical meeting. However, the data on which the opinions are based have sometimes come from selected populations and may not, therefore, be completely representative. Sometimes rare, but not necessarily serious, complications are given emphasis without a complete analysis relating benefit to risk. Once again, the data simply do not permit judgments that are sufficiently reliable to provide a basis for major national programs.

Another aspect of the problem of secondary hypertension is related to bacteriuria and pyelonephritis. Since bacteriuria is frequently, but not necessarily, associated with pyelonephritis, and since there have been strong suggestions in the past that pyelonephritis might occur in as many as 15 to 20 percent of cases of hypertension, it is reasonable to determine whether bacteriuria, which is readily detectable, is etiologically related to hypertension. The problem has been discussed in detail in several reviews and symposia. The point to be made here is that the detection of bacteriuria in communities, the proof of an association with hypertension, and the demonstration of the possible efficacy of early treatment of the infection require extensive study and documentation; the considerations involved are as complex as those outlined above in the discussion of the problems of detection and treatment of hypertension.

The foregoing has stressed particularly the problems involved in contemplating large-scale programs for prevention of some aspects of excess morbidity from cardiovascular illness. The difficulties are of such magnitude that many investigators may be discouraged from further study of the problem. There are, however, possible benefits from such studies that may provide fundamental knowledge of such value as to make unimportant an excessive concern with the problem of detection and treatment of hypertension.

For example, a secular trend suggesting decline in the number of cerebrovascular accidents has been going on for at least 30 or 40 years. Assuming that hypertension is the most common cause of such strokes, and assuming that the diagnoses are sufficiently sound to establish that a secular trend exists (both assumptions have enough general validity to be acceptable, despite the reservation), the suggestion is implicit that something has happened that may have had a remarkable effect on rates of hypertension. Detailed investigation of environmental and socioeconomic influences is desperately needed to help uncover the reasons for the change in incidence of strokes, with the hope that these can be exploited on a mass basis in order to provide a more economical and productive means for control than can be achieved by presently available detection and treatment programs. Trace metals, other dietary influences, psychological effects, unknown infectious agents, and many other possibilities need work at fundamental biological levels.

The classical argument concerning the relative influence of genetic and environmental effects on the genesis of hypertension is still not completely solved, although at times it has become sufficiently tiresome to provide a potent stimulus to getting it solved as quickly as possible. Although the familial effect of hypertension is substantial, the regression of blood pressures of individuals against their first-order relatives is not likely to exceed a regression coefficient of about 0.3. Even assuming that the familial effect is due to a single dominant gene (an unacceptable assumption), there still must remain large environmental components to hypertension, and these, if identified, are more likely to be subject to manipulation than are genetic components.

Hardly a problem in cardiovascular research could be more pressing than the identification of environmental factors in the genesis of hypertension. Epidemiological investigations have made it clear that such factors must exist. It remains for epidemiologists and more mechanistically inclined clinical investigators to collaborate in intensive efforts to solve the problem of environmental effects on blood pressure. It may be that such solutions will have secondary benefits of equal interest. Correlations have been demonstrated between levels of blood pressure and the presence of uterine fibroids, and with diminished fecundity, as well as with other biological events, and no present-day concepts of hypertension account for why hypertensives have more fibroids and fewer children than do normotensives. There is a vast potential for biological discovery in the truest sense of the words.

Recent observations indicate some of the restrictions that have inadvertently been placed on thought about the problem of hypertension. For example, the familial effect on blood pressure, which was demonstrated in adult populations by Pickering and his associates⁷ and by Miall and his associates,⁸ has been investigated in detail by Zinner⁹ in my laboratory. In these studies, arbitrary designations of levels of blood pressure that were indicative of hypertension were discarded; instead,

standard-deviation units for each individual were assigned and corrected for age and sex. On this basis, it could be shown that the familial aggregation of blood pressure that is characteristic of adults can readily be demonstrated in children aged 2 to 14, and that the regression relationships characterizing the familial effects are of the same magnitude in children as they are in adults.

It would thus appear that the familial effect on blood pressure is detectable in early childhood. How early remains to be seen. If the level of blood pressure is altered by substantial environmental components, it is conceivable that the environmental effects should be sought in early childhood, or perhaps even in the prenatal state. The potential for preventive action that is inherent in such considerations is apparent.

At least it is beginning to be realistic to talk about doing something about hypertension on a substantial scale, but the academic establishment must supply critical research data before the public health authorities can step in.

Other population studies

How about other examples of needed research? We are told by population geneticists that, at least in small samples, up to 1 or 2 percent of newborns have some type of chromosomal abnormality. In the overwhelming majority of these infants, there is no accompanying identifiable clinical disorder. Are these individuals of special risk later? We have learned that some crimes of violence are associated with XYY and related chromosomal abnormalities. Apparently sexual conflicts arise in individuals at the deepest biological levels. Recent data from Scotland indicate that XYY abnormalities may occur in about 1 in 500 newborns, and that most of these are clinically unaffected at birth. Is this not a major area for a most important kind of study?

In the field of chronic pulmonary disease, it has been a classical teaching that environmental pollutants cause hypersecretion of mucus and impaired ciliary action, and that the bacterial load in the lungs and bronchi are secondary to this, so that by this view the bacterial component of chronic bronchitis is secondary to hypersecretion and impaired ciliary motion, and is therefore not critical to the pathogenesis of the disorder. However, recent data from our laboratory and from others have indicated that it is the pulmonary alveolar macrophage, and not the mucus-secreting bronchial tree, that seems to dispose of most inhaled bacteria. Determining which of these hypotheses is correct in man would have relevance to the direction in which prevention and treatment should go.

Holland and his associates¹⁰ have studied 10-year-old children in London, and find that children who smoke have a higher rate of hospitalizable pulmonary disease than do nonsmoking children. Virtually none of the smoking children at this age have a chronic cough with sputum, suggesting that pulmonary defense mechanisms for microorganisms are impaired before there is clinical evidence of hypersecretion, thus favoring the likelihood

of an effect on bacterial defenses that is independent of hypersecretion and accumulation of sputum. The point here is that the characteristics of alveolar macrophages, which would presumably be the alternative defensive mechanism that would be critical to this increased susceptibility to infection, are surprisingly little understood. Enough is known to say that they differ from peritoneal or other macrophages, but it is not clear whether these differences are induced by the specific environment in the lung, or because the cells arise from different precursors or even from different germ layers.

We know that about 1 in 500 individuals do not seem to synthesize complete IgA in their nasal secretions. We know that IgA may protect against respiratory disease when there is no detectable circulating serum antibody, and that serum antibody alone may be ineffective. Are IgA-deficient individuals particularly at risk for respiratory disease? It is apparent that not all are, but the question may need to be settled at statistical levels requiring the study of large numbers of such individuals.

We have genetic markers that will identify as genetic individuals about 5 to 7 percent of our population. We need more such markers, and then it becomes useful to know whether these markers relate to specific patterns of disease. It is a noteworthy lesson in science that one of the most interesting discoveries of the past two or three years has been the discovery of the hepatitis-associated antigen that seems to be the virus of serum hepatitis. This discovery was made by a population geneticist who was studying the interaction of sera, hoping to find better genetic markers for following large populations. No better example could be found of the unexpected returns from scientific exploration.

These population studies are expensive, time-consuming, and much more difficult to conduct than are the usual laboratory experiments. Yet who can deny that when the problem is carefully selected, and the manner of execution scientifically validated, the results are particularly meaningful for those of us who have elected to work with problems of disease.

CONCLUSIONS

This brings us back to the general problem of priorities. A certain number of scientific personnel must have the opportunity to work at levels that are not directly related to anything—abstract problems, basic questions, broad understanding of biological processes are the goals. Not many individuals are temperamentally and intellectually suited for such pursuits, but those who are must be supported, as a matter of scientific survival for all of us. A much larger group of medically trained young people are fascinated by problems of disease, are interested in studying mechanisms, have acquired the clinical and laboratory competence to do the work that is needed, and now must set their course. Some will follow the road to academic success of the past few decades, which has generally consisted of finding an interesting mechanism, preferably in a

relatively rare clinical disorder, and of studying it as deeply as one's capacities permit.

Others, however, may find more satisfaction in studying common disorders, in large populations, in order to arrive at understandings of the natural history of disease in man. Here the universe of possibilities is unlimited and virtually unexplored. The needs are overwhelming. This is not a place for amateurs of modest competence or for well-meaning do-gooders, who would hope that by whispering over and over again the magical incantations "community, teaching, and maldistribution" they will automatically gain salvation. Too many medical leaders have tried this form of magic and have found it wanting.

What we need are highly skilled, highly motivated scientists, sensitive to the needs of the population and aware of the unsolved problems of medicine, willing to work very hard to work out solutions in the vastly more complex setting of the population group, and willing to extract satisfaction from the realization that few, if any, other paths are likely to be as productive

in affecting the health of the community, or in setting the direction of biological investigations that relate to problems of disease in man.

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It is unfortunate for the unhappy persons who contract [venereal disease] that it lies under a sort of disgrace. This renders disguise necessary, and makes the patient either conceal his disorder altogether, or apply to those who promise a sudden and secret cure; but who in fact only remove the symptoms for a time, while they fix the disease deeper in the habit. By this means, a slight infection, which might have been easily removed, is often converted into an obstinate and sometimes incurable malady.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 339.*

Something is Happening on our College Campuses

Takey Crist, M.D.

IF the latter part of the sixties were the years of riots on our college campuses in America, the seventies hurled the onset of a so-called sexual revolution on these same campuses. What significance does this new movement have? What will it mean for the future of our young people?

Personally, I believe the happening on our college campuses is a promising sign. It is timely; it is a necessity. It is a healthy action on the part of our young people. Maybe they are trying to tell us something.

The old deterrents of venereal disease, pregnancy, and fear of detection are gone; instead of relying on negative controls of fear, we are coming into a time of positive controls by personal commitment and responsibility.¹

The frankness and openness with which young people are discussing these subjects are much more natural and refreshing and appropriate to man's basic nature than the tenseness, overrestraint, and shame expressed by the older standards.

The signs that something was going to happen on our campuses was first recorded by Gael Green² in 1964 when she published her sensational report from the American co-ed on campus sexual life.

It was an early sign of warning, but most health services and college officials neglected it. It was easier to sweep abortion, contraception, and sex education of the college student under the rug—"If we turn our backs long enough, the problem will take care of itself."

However, the problems did not take care of them-

selves. They became bigger. The students took their own action. The efforts of students in North Carolina began to manifest themselves in the summer of 1970 with an onslaught of booklets on sex. Students at McGill, Canada, probably take credit for the first booklets that appeared in this country. The first to appear in North Carolina was put together by a group of Duke co-eds. The idea spread, and to date 14 different booklets have been published and distributed on college campuses throughout the United States, and I predict by 1972 the number will probably double.

These booklets are not limited to *sex instruction*, but give frank, honest information concerning reproductive anatomy, physiology, and contraceptive and abortion services.

I think the force that is gathering on many of our college campuses with regard to the desire for sexual information and to the publishing of sex education handbooks suggests strongly the lack of adequate focal points for obtaining the necessary information in this very significant area. Because of the taboos associated with the subject, information had been secreted and equated primarily with individuals who are abnormal. The questions asked by college youth today are legitimate, necessary, and should make us all respond thoughtfully, adequately, and quickly to fill the void that has been there for such a long time.

Administrators have been reluctant to sanction such booklets for fear of parental and legislative criticism. Some have stated that such information will cause young people to become more promiscuous.

There never has been any scientific data to show that frank, honest information on abortion, contraception,

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and sex education will increase sexual unions.³ Most people with proper information will act more responsibly. I know of very few physicians who have been criticized by parents for helping their daughters with a medical problem.

With regard to this so-called sexual revolution, a few observations and comments are in order. First, a significant question needs to be answered: Are we indeed experiencing a sexual revolution? Maybe we are not. For what is in fact occurring seems too chaotic and varied to describe as a revolution. A revolution implies a clear movement in an understood and generally supported direction. A better description of what is happening might be what Vance Packard referred to as a sexual wilderness.⁴ And still there are others who write about the Christian response to the sexual revolution.⁵

Although college students have begun to ask questions and take action, the adult world has allowed them to search for themselves and without any direction. How can we help our young people assume the responsibility that goes along with their desire for sexual freedom if we fail to listen and to attempt to guide them with understanding?

For generations American colleges have provided courses in what purported to be sex education, usually required, usually for freshmen, usually euphemistically called "hygiene." These courses explained the anatomy and physiology of reproduction, and often avoided explicit sexual references by using examples from the plant and animal worlds. They were in general, too elementary for the level of the audience, and they did not even attempt to deal with human sexual behavior, let alone with its emotional and ethical overtones.⁶ The marriage or family courses offered do little more than explain parental roles and how to budget a family income. And it is becoming evident as criteria are examined that many teachers now offering family life and sex courses are inadequately prepared for the responsibility.⁷

We need to reevaluate our health education and marriage courses and update them for today's fast changing world. We need to critically evaluate the contents and not be afraid to try something new called "human sexuality." Admittedly, colleges have a more important job to do than to teach 18- and 21-year-olds where babies come from. But there is evidence that college students are considerably less knowledgeable than they appear to be.⁸

The university should respond, for to abdicate this responsibility would leave instruction and consideration to the commercial interest of our society. It is clearly evident that already this is happening, when one observes that novels are heading the best-seller lists and movies are well attended, and when sex is the predominant theme. Higher education must take seriously the very important part of education that will equip the "whole man" for his responsible participation in society. These fundamental facts and principles regarding sexuality must become a part of the educational process,

through course offering continuing educational instruction and opportunities for informal dialogue.

The thousands of students who have been meeting on their own time at Amherst, Mt. Holyoke, Yale, Dartmouth, and Brown to get information that for years was considered taboo says something of its need and interest. Without any formal announcement a course entitled "Topics in Human Sexuality" was begun at the University of North Carolina. Two hundred and twenty-five students enrolled in a 24 hour period, and 300 other students were turned away for lack of space and time.

Contraception

Information on contraceptives and related sexual subjects are not generally available to unmarried students at most student health services. And most of the instruction that students get is bootlegged information or misinformation. Most reports in the past have omitted questions about contraceptives and their use by college students. Two recent reports about contraceptives and college students both attest to the ignorance in this area and lack of adequate methods used.^{9, 10}

The implication is obvious: Without proper education and instruction in the use of contraceptives, how can we expect individuals to know better. How can the unwanted pregnancies be prevented if physicians refuse to give the necessary information. It is as though pregnancy were being forced on a girl for stating that she was sexually active when in truth she was acting responsibly to herself, her boy friend, and society.

This is not to say that the moral question is not important; it is. But as physicians, we should do what is necessary. If an unmarried girl who is sexually active comes to a physician and seeks contraceptive advice, she is not asking for a lecture on morality, but medical advice. This does not imply that counseling is not important in helping young people make important sexual decisions. Certainly the girl who is thinking about having intercourse needs to think more and act less.

At this year's Southern College Health Association, it was encouraging to hear physicians, young nurses, and student health directors discuss a new philosophy with regard to contraceptives and the college student. Only time will enable us to see if more liberal policies and practices are adopted. Most of the larger university health services have begun to prescribe contraceptives and give contraceptive information. Private, church-supported and small colleges still have not made these services available to these high-risk students.

As responsible physicians who have been trained to treat women, we can no longer take refuge from the problems facing us in this so-called "sexual revolution" by saying "it doesn't happen here" or "this is against my religion." It has been already shown that parents have contributed unwillingly to their children's lack of responsibility with regard to contraceptive practices and sexuality by avoiding frank discussion of these issues and by handing their adolescent children over to a college in the expectation that the college will teach them, or by denying their questions entirely on the as-

sumption that the problem will take care of itself.⁶

As the demand for contraceptives increased, a Health Education Clinic was formed at North Carolina Memorial Hospital under the auspices of the Department of Obstetrics and Gynecology. During its implementation lectures on sex education, abortion, and contraceptives were carried out in dormitories and sororities by interested residents. Small group discussions, seminars, and visual aids were used as teaching methods. Although all the data have not been analyzed since implementation of the clinic, there is an impression that abortions have decreased and that the students are more knowledgeable with regard to contraceptive practices.

Abortion

Let's be realistic. When we allow ignorance to prevail in the areas of family planning and contraception, this ignorance ultimately becomes our problem as abortions.

I do not believe that anyone will ever know the exact number of abortions, legal or illegal, that are performed on any given college campus. The variables are too many. For example, one girl may consult a clergyman and be referred out of state or to a sympathetic physician in the state. The girl may herself make legal arrangements and fly to New York. She may seek and obtain an illegal abortion, and unless there are complications requiring hospitalization, no one will ever know of the abortion.

Frankly, I am not concerned over percentages and

numbers of abortions on our college campuses. What difference does it make, anyway, whether the rate is one abortion to a hundred girls or ten to a hundred girls. The most this type of information does is cause sensationalism. The facts are that abortions, legal or illegal, are occurring on our college campuses. The point is, we must realistically face the issues and prevent the unwanted pregnancy. The problem is not really the pill or the abortion, but more basically the psychology and understanding of human reproduction and the *student* and the delivery of good health care to the student on our college campuses in this state and in this country.

Conclusion

Something is happening on our college campuses. In a sense it is a search for perspective. What are we doing to help these young people?

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A virulent gonorrhoea cannot always be cured speedily and effectually at the same time. The patient ought not to expect, nor the physician to promise it. It will often continue for two or three weeks, and sometimes for five or six, even where the treatment has been very proper. —William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 339.

The Anatomy of a Solo Pediatric Practice in a Small Town

Dan P. Boyette, Jr., M.D.

AS part of a survey of some of the problems associated with the delivery of health care to children in North Carolina, I was asked to present the viewpoint of a small town solo practitioner of pediatrics. By the very nature of the topic, most of what I say will be in the first person singular. Although some comparisons with previous years will be made, the main facts will be drawn from a survey of the experience of a single calendar year—1970.

My office is located in Ahoskie in Hertford County, a town of approximately 5,150 population in Northeastern North Carolina. I was born and schooled here before progressing to the centers of higher learning and professional training. I returned home to practice just after a new hospital was opened and a new medical center established.

There are advantages as well as disadvantages to going home to practice any phase of medicine, but especially as a young pediatrician. One deals with a good many old school chums who now have children. And the grandmothers call you by your first name and refer to you as Dan Junior or Little Dan Boyette. However, you do know something of the social structures of the town and its people, and can better recognize certain unspoken values. People in my area formerly traveled 60 miles to obtain pediatric care. Naturally those receiving pediatric services were small in number and usually well-to-do. Pioneering in a new type of

medical service in the area and in the new hospital offered many challenges, but the results have been personally satisfying and the financial rewards adequate.

ENVIRONMENTAL CHARACTERISTICS AND MEDICAL FACILITIES

Although Ahoskie is a small town for pediatric practice, it draws patients from an area of approximately 80,000 people. There are 10 or 12 smaller towns around us, each with one or two general practitioners. The area is chiefly rural, but each town has one or two small industrial plants. The general economy has changed considerably in the few years that I have been located here, changes that have obviously affected certain aspects of practice.

The hospital had a capacity of 50 beds when it opened. Twenty-five beds were added four years later, and another 25 were added four years after that. A nurses' home, completed soon after the hospital opened, was recently converted into a self-care unit, giving us now a total of 125 beds. Being a general hospital, it has no specific pediatric section, but there are two wards exclusively for children—one with six beds and one with five. In addition we place children in any of the private and semiprivate rooms that are available. We have four nurseries: a main nursery, a secondary nursery, a premature nursery with six Isolettes, and an isolation nursery.

For the past several years there have been approximately 600 obstetrical deliveries per year in the

hospital. In 1970 I attended 434 of the 626 infants born that year. The same year we had 40 prematures with a survival rate of 85.5 percent, losing only seven very small infants. Our premature nursery accounts for almost all the pediatric deaths. In 1970 we lost only one other patient, and that one was admitted into the hospital only 25 minutes before death.

My first office was located downtown in the business district. Since then a group of doctors and a pharmacist have built a medical arts center on property adjoining the hospital on the outskirts of town. My suite contains 1,350 square feet of floor space and includes a large waiting room, a nurses station, a business office, two examining rooms, one isolation or "shot" room, a laboratory, a consultation room, three rest rooms, and adequate storage space.

My office is open four and a half days a week. It is closed on Saturdays and Sundays; however, Saturday morning is usually spent in the hospital with paper work. Very few night calls and no home visits were recorded in 1970. Most after-hours patients are seen in the hospital emergency room in the early evening hours.

My office staff consisted of one nurse for the first six months of practice. Then a receptionist-secretary was added, and in 1969 a third employee, who works in both the front and back offices. All simple tests—such as white blood cell counts, hemoglobin determinations, urinalyses, stool examinations for ova and parasites, blood sugar determinations with Dextrostix—are performed in my office laboratory. Blood chemistry studies, cultures, x-rays, electrocardiograms, and the like are referred to the hospital laboratory.

I take turns with the other physicians on the hospital staff in covering the emergency room. This poses no great problem or inconvenience. Two general practitioners in the Medical Arts Center cover for me when I am out of town. Vacation time is usually arranged with a locum tenens.

In office practice, I am the primary physician in well

over 90 percent of the cases. However, approximately 30 percent of the pediatric hospital cases are referred by local and nearby physicians.

The Hertford County Public Health Department sponsors two well baby clinics each month. I am the pediatrician on duty at these clinics for approximately one hour each, seeing about 20 infants at each clinic.

When I first began practice we accepted children up to the age of adolescence. Now we attend our patients through high school.

Patients are referred from my practice to the university teaching centers for consultation on the average of about one a week. At least that many are referred to local or nearby consultants, both in pediatrics and other specialties.

Collections in 1970 were more than 98 percent, and expenses were almost an even 30 percent of gross income.

COMPOSITION OF PRACTICE

In 1970 we recorded 9,473 office visits. This does not mean 9,473 individual patients, because the majority made more than one visit. Also in 1970 I treated 411 children in the hospital (not counting newborns). A general classification of the types of cases seen in the office with the numbers of each category is presented in Figure 1 and graphically in Figure 2. The number of office and hospital patients by month is shown in Figure 3, and the distribution of hospital patients in Figure 4.

Respiratory diseases and well child care constitute the bulk of the cases seen. This finding is consistent with the surveys of Aldrich¹ in 1934, London² in 1937, Boulevard³ in 1958, and Bergman, Dassel and Wedgwood⁴ in 1966. Respiratory diseases included upper respiratory tract infections, tonsillitis, otitis media, pharyngitis, laryngotracheitis, bronchitis, pneumonia and pleural effusion.

Gastrointestinal disorders included gastroenteritis, duodenal ulcer, feeding problems, hypertrophic pyloric

1970	Resp	G.I.	W.B.V.	Ref.	G.U.	Derm	Misc.
Jan.	265	73	193	233	3	14	153
Feb.	292	73	172	237	1	19	126
Mar.	256	22	187	215	4	12	104
Apr.	222	41	229	190	4	26	154
May	275	34	219	144	4	25	118
Jun.	160	20	230	177	4	21	156
Jul.	133	31	226	182	10	44	142
Aug.	166	26	279	190	3	51	88
Sep.	200	20	257	143	10	48	74
Oct.	264	38	292	185	2	38	135
Nov.	343	41	257	247	3	25	119
Dec.	356	40	222	248	4	32	120
Total	2632	459	2563	2391	52	365	1489

Fig. 1. General classification and number of cases seen in office practice.

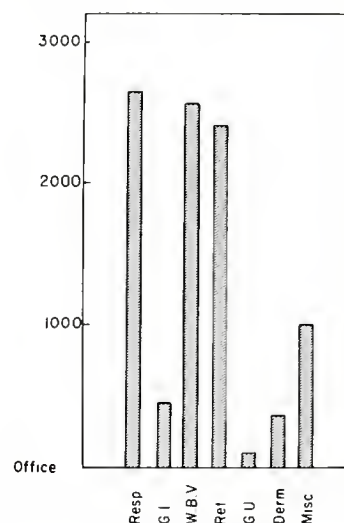


Fig. 2. Graph indicating type and number of office cases.

stenosis, dehydration, milk allergy, megacolon, and one case of tuberculous enteritis.

Miscellaneous diseases included, among others, meningitis, anxiety state, burns, accidental poisoning, sickle cell anemia, diabetes mellitus, snake bite, concussion of the brain, skull fractures, paroxysmal auricular tachycardia, mononucleosis, nephrolithiasis, and congenital heart disease.

In addition to the routine sniffles and diarrhea, we have our share of unusual cases. In 1970 we encountered one case of Turner's syndrome in a male, two cases of visceral larva migrans, and one case of reticulendotheliosis (Letterer-Siwe's disease). All diagnoses were made in Ahoskie and confirmed by the scientists in university teaching centers.

EDUCATIONAL OPPORTUNITIES

Continuing education is not difficult in eastern North Carolina. We have a series of postgraduate courses sponsored by the University of North Carolina School of Medicine and the First District Medical Society in the winter; the Hertford County Medical Society has regular scientific meetings; the pediatricians of northeastern North Carolina meet informally once a month with a guest pediatrician from one of the teaching centers to discuss some particular subject of current interest. Then there is the annual meeting of the North Carolina Medical Society in the spring, the fall meeting of the North Carolina Chapter of Academy of Pediatrics and the North Carolina Pediatric Society. In summer the Seaboard Medical Society brings us in contact with the physicians of the Norfolk, Virginia, area, and because of my location near the Virginia line, I attend the meetings of the Virginia Pediatric Society. Also there are several hospital-sponsored symposiums throughout the area—all this in addition to the medical periodicals, journals, and tapes.

CHANGES IN PEDIATRIC PRACTICE

In 1937 Dr. Arthur London² presented a paper on the composition of an average pediatrics practice in

Durham, North Carolina. The general distribution of types of cases encountered at that time was generally similar to mine except that the percentage of gastrointestinal disorders was higher then. We are encountering a different range of problems now than pediatricians did 30 years ago. Some of the ailments that were common then are rare now, but in their place we are seeing increasing numbers of problems related to the social and economic pressures of our time. The number of cases of anxiety state and tension, or "schoolitis," is higher now than that reported by London and others. This seems to be one type of complaint that is increasing in number faster than the overall growth of population. London concluded that the similarity between private and hospital dispensary practice at that time was of sufficient quality and nature to prepare the pediatrician-in-training properly for private practice. Word-of-mouth opinions from my colleagues in the teaching institutions indicate that this conclusion is still germane. Of course these institutions still see a predominance of the rare and complicated conditions, but the students see enough of the routine cases to be familiar with the types of problems encountered in private practice.

SUMMARY

A general survey of a small-town solo pediatric practice is presented. Statistics for the calendar year 1970 are reviewed. Few conclusions are drawn, just the facts presented. The statistics indicate that respiratory diseases and well child care (including immunizations and prophylaxis) predominate in private pediatric practice.

All in all, living and practicing pediatrics in a small town is satisfying and wholly enjoyable.

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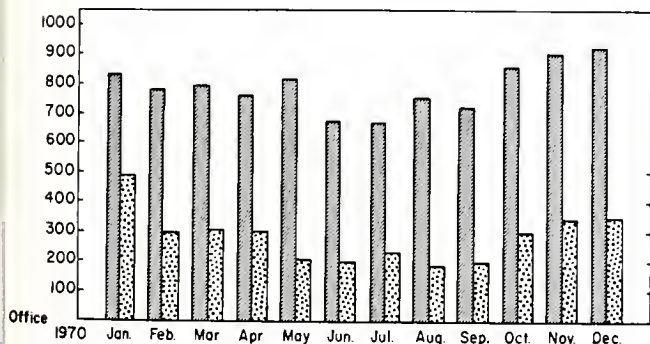


Fig. 3. Graph indicating by month the number of office and hospital patients treated.

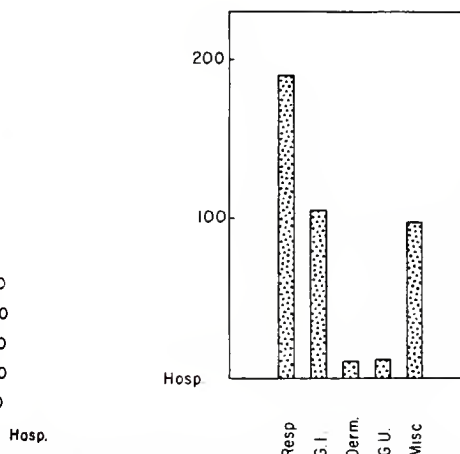


Fig. 4. Graph showing classification of hospital cases.

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Studies showed that with the 2% and 5% Efudex preparations, the usual duration of therapy was only 2 to 4 weeks.⁵ Other studies with topical fluorouracil revealed that when concentrations of less than 2% were used, significant numbers of lesions recurred.⁶

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Numerous lesions, not apparent prior to 2% and 5% Efudex therapy, manifested themselves by definite reactions, while intervening skin remained relatively unaffected.⁵ The early eradication of these subclinical lesions (which may otherwise have undergone further progression) probably accounts for the reduced incidence of future solar keratoses in patients treated with topical fluorouracil—especially with 5% concentrations.⁶

How to identify solar keratoses.

Typically, the lesion—a flat or slightly elevated brown to red-brown papule—is dry, rough, adherent and sharply defined. Multiple lesions are the rule.

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The response to a typical course of Efudex therapy is usually characteristic and predictable. After 3 or 4 days of treatment, erythema begins to appear in the area of keratoses. This is followed by a moderate to intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of this response generally occurs two weeks after the start of therapy and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. Lesions that do not respond should be biopsied.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

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Editorials

A NEW PRINTER

With this issue the JOURNAL starts a new contract with an old printing house, Raleigh's Edwards & Broughton, a firm active in all aspects of the printing business. With a clientele including trade journals of the textile industry, they have long experience in handling the sort of material we use, and do it with great style. The work of their art department should be apparent from the moment the JOURNAL comes out of the envelope, and continue to be evident from front to back of the issue. The new type face, the self-containment of each article on its own pages, the new title style, the use of an initial letter at the beginning of each article, are all small matters whose additive effect, it is hoped, will be an attractive one. There are others as well—the shifting of the editorial staff listing to the index page, for example—which the reader is left to find as he goes through his copy. With their plant located not far from our headquarters building, the business side of JOURNAL activities should be expedited, including the handling of address changes and advertising matter. The improved appearance of the JOURNAL may well be a stimulus to attract new advertising, vital to the existence of the Society's prime publication. We hope for a long and satisfactory partnership with a printer whose history is one of establishing such relations.

LOVE THAT INNOVATION!

In the April 12, 1971 JAMA (216:322-323), Dr. Edwin Rosinski (whose degree is in education) of the University of California expresses his disappointment at what he considers a lack of really innovative approaches to medical education in the new schools which have sprung up in the nine years since federal subsidies for medical school construction became available. His feeling is that the people who have been appointed as deans, most of them because they had been associated with curriculum revision elsewhere, get bogged down in construction and staffing problems and turn curriculum matters over to someone else, who may make arbitrary decisions about the curriculum, because not many of the faculty are around to be consulted, winding up with a chiefly derivative curriculum with perhaps only a few spots of innovation. Dr. Rosinski seems to take it as true that this is bad,

even though he gives us no plan for measuring curriculum efficacy. The things people write about their curricula might not tell much about how they are carried out in practice, and there is the perennial problem of knowing how to evaluate the graduates.

At the risk of being considered reactionary, or less politely, a fuddy-duddy, might it not be pertinent to ask whether there is any proof that the curriculum means much in terms of what sort of physician the student becomes? Mightn't the best curriculum be one that places the fewest obstacles between talented students and gifted teachers, with the real problem being finding the people to fit those categories? By and large the good students find what they need in our modern medical schools, although in a few areas such as behavioral science there was a time when people to teach were not available. One of the chief benefits of current curricula are deemphasis of some subjects which were taught more as initiation rites than for their intrinsic value—long anatomy courses for example. Perhaps the new schools that Dr. Rosinski thinks have not done what they could have with curriculum planning do not share his taste for total innovation. They may feel that much of what was wrong with the curricula of 25 years ago has been rectified, and want to see how things go before taking off in a new direction.

After all is said and done, there might be only a few ways in which one can give a student an opportunity to get older while being exposed to the subject matter of interest to him, guided by experienced people the meanwhile. Maybe most of these ways have already been tried, and all that the future holds is refinement of detail. Maybe some of these old ways are waiting for rediscovery and presentation as a total innovation. For example, the block system of teaching may be dragged out again one of these days complete with TV tapes and computer-assisted question and answer sessions. Or maybe the ultimate in motivation will be provided by a system in which the student spends most of his year seeing patients with a valued medical practitioner, and will go to a central medical school facility only periodically for basic instruction and laboratory experience. It worked pretty well before the days of the florid diploma mills, and with the new gadgetry might really do well now. Called "totally innovative rediscovery and refurbishment" it might even intrigue Dr. Rosinski!

SUGGESTIONS FOR AUTHORS

The NORTH CAROLINA MEDICAL JOURNAL welcomes original contributions to its scientific pages, expecting only that they be under review solely by this JOURNAL at a given time, and that they follow a few simple guidelines. The guidelines are as follows:

1. Subject Matter

Educational articles, especially those in which particular applications to the practice of medicine in North Carolina are developed, are one of the main objectives of this JOURNAL.

Articles reporting original work by North Carolina physicians are invited, whether the work is done in a clinic, a laboratory, or both. The editor and his consultants will evaluate the work by the usual criteria, including a proper discussion of previous work, control observations, and statistical tests where indicated.

Historical articles, especially those dealing with local history, are considered of real value and interest.

2. Manuscripts

An original and a carbon copy of the manuscript should be submitted, one for review by the editorial staff, the other by referees. The manuscript should be typed on standard-size paper, double-spaced, with wide margins (one inch on each side).

3. Bibliographic References

References to books and articles should be indicated by consecutive numerals throughout the text and then typed, double-spaced, on a separate page at the end of the manuscript.

Books and articles not indicated by numerals in the paper should not be included.

References will be much more valuable to the reader if they are given in a proper form and contain the full information necessary to locate them easily. The NORTH CAROLINA MEDICAL JOURNAL follows the form used in the journals of the American Medical Association and the *Index Medicus*, giving the author's surname and initials, title of the article, name of the periodical, volume, inclusive page numbers, and the date of publication. It is believed that this style makes it easier for the reader to judge whether the reference is likely to prove useful to him, and enables him to locate it more quickly.

4. Tables and Illustrations

Tables and legends for illustrations should be typed on separate sheets of paper. The illustrations should be glossy black-and-white prints or line drawings. It is necessary to obtain permission from the author or publisher to reproduce illustrations which have been published elsewhere. Costs in excess of \$15.00 for illustrations are borne by the author. Costs for setting of tables are also borne by the author, as are charges for art work which might be needed for proper printing of figures.

5. Style

The style followed by this JOURNAL will be, in general, that outlined in the Style Book issued by the Scientific Publications Division of the American Medical Association, John H. T. Hot, M.D., director. All manuscripts are subject to editor revision for such matters as spelling, grammar, and the like.

By following the above suggestions, writers will greatly expedite the publication of papers accepted by the NORTH CAROLINA MEDICAL JOURNAL.

The practice of sucking out poisons is very ancient; and indeed nothing can be more rational. Where the bite cannot be cut out, this is the most likely way for extracting the poison. There can be no danger in performing this office, as the poison does no harm, unless it be taken into the body by a wound. The person who sucks the wound ought, however, to wash his mouth frequently with salad-oil, which will secure him from even the least inconveniency. The Psylli in Africa, and the Marsi in Italy, were famed for curing the bites of poisonous animals by sucking the wound; and we are told that the Indians in North America practice the same at this day.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 336-337.

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Mr. H.C., 40, taxicab driver, married with four children. Complains of anorectal pain, itching and irritation. Works long hours often in extreme heat in non-air conditioned cab. Sweats a great deal. Sudden perianal swelling two days ago. Similar episode when he was 24 years old. Examination reveals large prolapsing edematous internal and external hemorrhoids.



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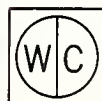
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WHAT? WHEN? WHERE?

In Continuing Education January, 1972

A Directory of Self-Assessment Programs for Physicians is now available upon request from the Department of Continuing Medical Education, 535 North Dearborn Street, Chicago, Illinois 60610. Under the headings anesthesiology, clinical pathology, dermatology, internal medicine, multidisciplinary programs, neurology, obstetrics-gynecology, ophthalmology and otolaryngology, orthopedic surgery, pediatrics, psychiatry.

radiology, and surgery, the directory lists 20 operational and one developing program designed to provide you, the practicing physician, with "a systematic inventory—of your own acquaintance with, and access to, currently valid biomedical knowledge and procedures."

Of the 21 programs listed, 19 are offered by specialty medical societies, one by a county medical society and one by a college of medicine.

I. Current Events in North Carolina January 28, 10 a.m.-9 p.m.

Joint Hospital-Medical Staff Conference—for medical staff members, board members and administrators
Place: The Carolina, Pinehurst
Sponsors: MSSNC and N. C. Hospital Association
For Information: Mr. Bryant Paris, Medical Society Headquarters

January 28-29

Conference for Medical Leadership—for county society officers, committeemen and hospital medical staffs
Place: The Carolina, Pinehurst
Sponsor: MSSNC
For Information: Mr. Dan Mainer, Medical Society Headquarters
For Details see December issue of *Journal*

January 28-31

Second Annual Surgical Symposium
Place: Bowman Gray School of Medicine
For Information: Paul M. James, M.D., Department of Surgery, Bowman Gray School of Medicine, Winston-Salem, 27103

January-February

Cooperative Program in Continuing Education (for details see Guest Editorial, Dec., 1971 issue of *JOURNAL*)
Jan. 19: Nash General Hospital, Rocky Mount, 2-9 p.m.

Jan. 26: Teer House, 4019 N. Roxboro Rd., Durham, 2-5 p.m.
Feb. 2: Albert Pick Motel, Greensboro, 2-9 p.m.
Feb. 9: Edenton, Edenton Restaurant, 4-8 p.m.
Feb. 23: Greenville, 3-9 p.m.
For Information: Ron W. Davis, Ed.D., Coordinator of Medical Education, MSSNC, P. O. Box 8248, Durham, 27704

February 15-March 21

Shelby Circuit Course
Place: Holiday Inn, Shelby
Sponsors: UNC School of Medicine and Cleveland County Medical Soc.
Type: 3 hrs/day, 1 day/wk, for 6 weeks
Fee: \$5/meeting; \$25 total
For Information: UNC School of Medicine, Chapel Hill, 27514

February 15-March 22

Hickory Circuit Course
Place: Lake Hickory Country Club, Hickory
Sponsors: UNC School of Medicine and Catawba County Medical Society
Type: 3 hrs/day, 1 day/wk, for 6 weeks
Fee: \$5/meeting; \$25 total
For Information: UNC School of Medicine, Chapel Hill, 27514

February 18-19

29th Annual Watts Hospital Medical and Surgical Symposium
Place: Durham Hotel and Motel
For speakers and topics, see November issue, *NORTH CAROLINA MEDICAL JOURNAL*
For Information: Morris A. Jones, Jr., M.D., The Watts Hospital, Club Boulevard at Broad Street, Durham, 27705

March 13-24

Nursing Supervision in the Cardiac Unit
Sponsored by: The Continuing Education Division, School of Nursing, UNC and the N. C. Heart Association
Place: School of Nursing, Chapel Hill
Designed for nurses supervising patient care in cardiac units or teaching personnel in these units.
Fee: \$250. N. C. residents may apply for partial tuition scholarship assistance, if needed, through the Johnston Awards.
For Information: Director, Continuing Education, School of Nursing, UNC, Chapel Hill, 27514

March 16

Wilson Memorial Hospital Annual Symposium: Surgical and Medical Aspects of Atherosclerosis
Place: Wilson Memorial Hospital, Wilson, 27893
Sponsors: Wilson Memorial Hospital and Wilson County Medical Society

Broadening Horizons of Health Care Managements
Sponsored by: Continuing Education, School of Nursing, UNC, Chapel Hill, 27514
Place: Carrington Hall, UNC, Chapel Hill

1. Development of Leadership Skills
March 6-10, 1972
Tuition \$60
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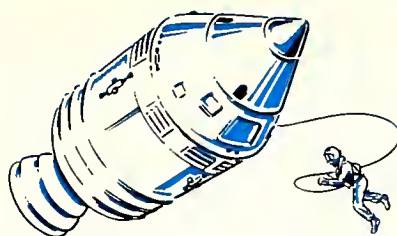
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972 Refresher Course, N. C. Academy of Family Physicians Alternate Sundays, Jan. 9-March 19

For Topics, see December issue of the JOURNAL

Designed to prepare Academy members for Board Exam in Family Practice and to cover common problems seen by family doctors

sponsored by: N. C. Academy of Family Physicians, Duke University Medical Center, Bowman Gray School of Medicine, UNC School of Medicine

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Fee: \$100

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For Information: Jack C. Knowles, Executive Secretary, 607 Gaston Street, Raleigh, 27602

II. Coming Events in North Carolina

May 1-2

Anatomical and Clinical Considerations of the Hand

Place: East Carolina University

Fee: \$100, practitioners & staff; \$50 residents

For Information: ECU, Division of Continuing Education, Box 2727, Greenville, 27834

May 18

23rd Annual Scientific Sessions of the N. C. Heart Association

Theme: "Sudden Death"

Place: White House Inn, Charlotte

For Information: Mr. Jim Street, 1 Heart Circle, Chapel Hill, 27514

May 29

Congenital Anomalies of the Cardiovascular System: Thorax

Place: East Carolina University

Fee: \$50

For Information: ECU, Division of Continuing Education, Box 2727, Greenville, 27834

June 4-9

Seminar: Cooperative Program in Continuing Education

sponsored by: NCRMP, MSSNC and 3 N. C. Schools of Medicine

Place: St. Johns Inn, North Myrtle Beach, S. C.

For Information: Ron W. Davis, Ed.D., Coordinator of Medical Education, MSSNC, 4019 N. Roxboro Road, P. O. Box 8248, Durham, 27704

III. Out of State (through April, 1972)

January 24-27

Course in Emergency Care Nursing

Fee: \$40

For Information: Mrs. Helen O'Toole, Staff Assistant, Division of Continuing Education, MUSC, Charleston, S. C. 29401

January 27-28

Hospital Association Winter Assembly

Place: Town House Motor Inn, Columbia, S. C.

For Information: Mr. Mack Mitchell, S. C. Hospital Association, P. O. Box 10005, Columbia, S. C. 29169

January 27-28

Clinical Psychiatry

For Information: Medical College of Georgia, 1459 Gwinnett Street, Augusta, Georgia 30902

February 5

Nuclear Medicine Workshop

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(Div. of Nuclear Medicine or Division of Continuing
Education) 110 21st Avenue, S., Nashville, Tennessee 37203

February 11-12

Oral Surgery in General Practice of Dentistry

Place: VA Hospital, 24 and Garland, Nashville, Tennessee
37203

Sponsors: Vanderbilt University School of Medicine and Ten-
nessee Mid-South RMP

Fee: \$120

For Information: Vanderbilt University School of Medicine
(Division of Oral Surgery or Division of Continuing Edu-
cation), 110 21st Avenue, S., Nashville, Tennessee 37203

February 12-13

Otolaryngology Spring Conference

Place: MUSC, Charleston, S. C.

Fee: \$25

For Information: Medical University of South Carolina, 80
Barre Street, Charleston, S. C. 29401

February 18-19

Dragstedt Symposium on Diseases of the Stomach, Small Bowel
and Colon

Sponsors: Vanderbilt University School of Medicine and Ten-
nessee Mid-South RMP

Fee: \$35

For Information: Vanderbilt University School of Medicine,
(Div. of Oral Surgery or Division of Continuing Education)
110 21st Avenue, S., Nashville, Tenn., 37203

February 18-19

Geriatric Dentistry

Fee: \$50

For Information: Dr. Richard Marsh, College of Dental
Medicine, MUSC, Charleston, S. C. 29401

February 18-20

Neuropathology Review Course

For Information: Medical University of S. C., 80 Barre Street
Charleston, S. C. 29401

February 23-25

Carcinoma of the Cervix

Fee: \$50

For Information: University of Tennessee, College of Medicine,
800 Madison Avenue, Memphis, Tennessee 38103

February 25-26

25th Annual Stoneburner Lecture Series: "What is New in
Anesthesiology"

Fee: \$40

For Information: M. Pinson Neal, Jr., M.D., Assistant Vice
President and Director, Continuing Medical Education, Box
91, Medical College of Virginia, Richmond, Virginia 23219

February 25-26

Conference on Management of Patients with Renal Problems

For Information: Mrs. Helen O'Toole, Staff Assistant, Division
of Continuing Education, MUSC, Charleston, S. C. 29401

February 29

Preview for nurses: New Horizons for Hope in Respiratory
Care

Place: VA Hospital, Columbia, S. C.

For Information: Mrs. Ann Myers, S. C. TB-RD Association,
1817 Gadsden Street, Columbia, S. C. 29201

March 1-3

Endocrinology and Diabetes

For Information: University of Tennessee, College of Med-
icine, 800 Madison Avenue, Memphis, Tenn. 38103

March 6-9

The Alton D. Brashear Postgraduate Course in Head and Neck
Anatomy

For Information: Dr. H. R. Seibel, Assistant Professor of
Anatomy, Medical College of Virginia, Health Science
Division, VCU, Box 91, Richmond, Virginia 23219

March 15-17

Psychiatry

Fee: \$50

For Information: University of Tennessee, College of Medicine,
800 Madison Avenue, Memphis 38103

March 15-17

Control of Infections in Hospitals and Institutions—Admini-
strative

Sponsors: Center for Disease Control, DHEW, USPHS; Heal-
th Care Facilities Service, PHS

For Information: Center for Disease Control, DHEW, USPHS,
1600 Clifton Road, NE, Atlanta, Georgia 30333

March 21-23

Greenville Postgraduate Seminar

Fee: \$20

Sponsors: Greenville General Hospital and Greenville Cour-
t Medical Society; SCRMP

For Information: Greenville General Hospital, 100 Malla
Street, Greenville, S. C. 29601

March 22

Headache: Clinical and Neurologic Aspects

Sponsors: Vanderbilt University School of Medicine, Depa-
rtment of Neurology and Division of Continuing Education
and Tennessee Mid-South RMP

Fee: \$15

For Information: Department of Neurology or Division of
Continuing Education, Vanderbilt University School of Med-
icine, 110 21st Avenue, S., Nashville, Tenn. 37203

March 22

The Office in Medical Practice

Sponsors: Jackson-Madison County General Hospital, We-
st Tennessee Consolidated Medical Assembly and Tennessee
Academy of General Practice

For Information: Jackson-Madison County General Hospital,
708 West Forest, Jackson, Tenn. 38301

March 22-24

Orthopedics for the Family Physicians

Fee: \$60

For Information: University of Tennessee College of Medicine,
800 Madison Avenue, Memphis, Tenn. 38103

March 23

Problems of Aging

Fee: \$10

For Information: William S. Hall Psychiatric Institute, Box
119, Columbia, S. C. 29202

March 27-29

Neurology for the Pediatrician

Place: Emory University School of Medicine, Department of
Pediatrics, 69 Butler Street, SE, Atlanta, Georgia 30303

Fee: \$75 members; \$105 non-members

For Information: American Academy of Pediatrics, 181
Hinman Avenue, Evanston, Illinois 60201

March 29-31

Children's Orthopedics
 Place: Marriott Hotel, Atlanta, Georgia
 Fee: \$150
 For Information: American Academy of Orthopaedic Surgeons,
 430 N. Michigan Avenue, Chicago, Ill. 60611

April 6-8

Annual Resident's Conference
 Fee: \$25
 Sponsors: Medical University of S. C., Department of Ophthalmology, 80 Barre Street, Charleston 29401. Co-sponsor: S. C. RMP

April 8

Clinical Endocrinology
 Fee: \$15
 For Information: Vanderbilt University School of Medicine, Department of Medicine and Division of Continuing Education, 110 21st Avenue S., Nashville, Tenn. 37203

April 14

Pediatric Day: Sutton Lectureship
 For Information: Medical College of Virginia, Health Sciences Division, Virginia Commonwealth University, Box 91-MCV Station, Richmond, Va. 23219

April 16

11th Annual Medical Symposium
 For Information: Bristol Memorial Hospital, Bristol, Tenn. 37620

April 26-28

Gastroenterology
 Fee: \$75
 For Information: Medical College of Georgia, 1459 Gwinnett Street, Augusta, Georgia 30902

Send information for listing to WHAT, WHEN, WHERE, Box 8248, Durham, North Carolina, 27704. To be listed in a specific issue, information must be received by the 10th of the preceding month. Issues are scheduled for appearance on the second Friday of each month.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

Dr. Gary R. Smiley, professor of orthodontics and coordinator of the Growth Mechanisms Group, has been appointed assistant dean for research at the UNC School of Dentistry.

In his new position Dr. Smiley will work closely with the associate dean for research, Dr. Andrew D. Dixon, in the administration of a variety of expanding research programs at the Dental Research Center and School of Dentistry.

* * *

Over 1,200 dentists, dental hygienists, dental assistants and dental laboratory technicians were here Dec. 1 for the 17th Annual UNC Dental Seminar Day.

The one-day affair featured a scientific session by UNC's Dr. James McLeran, the Dental Foundation

Luncheon with Homer Rice, UNC athletic director, and the meeting of the Dental Foundation of North Carolina, Inc.

* * *

Mrs. Arabella Russ of Monrovia, Liberia was faced with a problem when her small nursing school library was suddenly merged with a new teaching hospital. She must convert the library to fit the needs of the new facility.

So, the Liberian librarian has been spending the last three months at the UNC Health Sciences Library learning the ins and outs of a large medically oriented facility.

Sponsored by the U. S. Agency for International Development, Mrs. Russ has been concentrating on each library department and business functions. Miss Myrl Ebert, chief librarian of the Health Sciences Library, is in charge of the overall planning and coordination of Mrs. Russ' training program.

* * *

Over 100 North Carolina physicians were here Dec. 2 for the American College of Physicians scientific-educational meeting for specialists in internal medicine and related fields.

Featured speakers from throughout North Carolina and two panel discussions—"What a Medical Education Program Might Do for Your Hospital" and "The Nurse Practitioner—Relevance to the Internist"—highlighted the one-day program.

* * *

Over 100 ophthalmologists from across North Carolina came to Chapel Hill and Durham Dec. 4 for the Annual Staff Meeting of the Department of Ophthalmology of N. C. Memorial Hospital and McPherson Hospital.

A highlight of the joint meeting was the Samuel D. McPherson, Sr. Memorial Lecture given by Dr. John Clemet McCulloch, chairman and professor of the University of Toronto Department of Ophthalmology.

* * *

Miss Elizabeth Edmands, associate professor of public health nursing, is a featured participant in the Dec. 6-10 World Health Organization meeting in Geneva.

Miss Edmands is among a selected group of family planning specialists who have been called together to work as a study group on education and training for family planning in health services.

* * *

The UNC School of Medicine's Department of Pharmacology has received a \$941,400 National Institutes of Health grant to study and explain the effects of hormones on calcium metabolism in health and disease.

Principal investigator in the six-year research project is Dr. Paul L. Munson, Sarah Graham Kenan Professor and chairman of the Department of Pharmacology.

Dr. Munson explained that a primary objective in the study will be to point the way to procedures that could

improve the diagnosis and treatment of bone disease and other disorders of calcium metabolism.

The two hormones on which the research is focused are thyrocalcitonin and parathyroid hormone.

* * *

Over 20 scientists from Japan and the United States met here Nov. 22-24 to discuss control mechanisms in development.

The closed meeting was one of a series of U. S.-Japan Seminars on Control Mechanisms in Biology. It is held under the auspices of the U. S.-Japan Committee on Scientific Cooperation.

The seminars are designed to permit small groups of scientists of the two countries, with occasional participants from third countries, to exchange ideas and information and to discuss scientific topics of mutual interest.

Dr. H. Stanley Bennett, Sarah Graham Kenan Professor of Biological and Medical Sciences at the University of North Carolina here was one of the U. S. co-conveners.

* * *

A UNC endocrinologist has been awarded a \$26,000 National Science Foundation grant for continued study on "Steroid-Protein Interactions."

Dr. William H. Pearlman, professor in the Department of Pharmacology in the UNC School of Medicine, will do research on the binding of steroid sex hormones to proteins in human blood plasma.

* * *

Over 35 physicians from North Carolina were here Nov. 21 for a one-day workshop, "The Practicing Physician and His Teaching Role in Family Medicine."

Sponsored by the UNC Department of Family Medicine and the North Carolina Academy of Family Physicians, the workshop dealt with programs in undergraduate and graduate medical education.

* * *

The UNC School of Nursing's Continuing Education Program is currently sponsoring a series of one-day workshops focusing on assisting patients and families with long-term health problems.

One workshop a month will be held each month from now until May. Each program is independent of the others.

The next session "Am I doing all I can to assist the stroke patient to realize his full potential?" will be held Dec. 7 in Carrington Hall.

* * *

If you want to avoid heart attacks, it helps to be lean, black, poor, a non-smoker, and physically very, very active, a new research study designed here now indicates.

If you meet these requirements, one can apparently eat animal fat, have high cholesterol levels, suffer from high blood pressure and show electrocardiogram abnormalities without the high risk of heart disease one might expect.

These and many other new facts about coronary heart disease are coming to light following a ten-year research study which was developed and supervised here by UNC epidemiologists.

Dr. John C. Cassel, chairman of the UNC Department of Epidemiology, headed the UNC team of investigators.

The complex study was spearheaded and coordinated at the grassroots level by a Georgia general practitioner Dr. Curtis C. Hames.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Eleven seniors and five juniors in the Duke University School of Medicine have been elected to membership in the honor medical society Alpha Omega Alpha.

Membership also was conferred on an alumnus of Duke, Dr. Martin M. Cummings, director of the National Library of Medicine, who earned his M.D. degree at Duke in 1944, and on a faculty member, Dr. Frederick R. Hine, a professor of psychiatry.

Seniors elected were:

John Charles Alexander Jr. of Rocky Mount; Dan Kimball Andersen of Glen Cove, N. Y.; Daniel Har Barco of Medina, Ohio; Nicholas Theodore Carneval of Tucson, Ariz.; Dana Derward Copeland of Baton Rouge, La.; Glenn Craig Davis of Chapel Hill; Arnold Stephan Grandis of Richmond, Va.; Walter Jerry Oaks of De Soto, Mo.; Lee Alan Sanders of Levittown, Pa.; Richard Ivan Schiff of Wheaton, Md.; and David Ker ton Wellman of Huntington, W. Va.

Juniors elected were:

Scott Addington Martin of Morganton; David Houston Mason Jr. of Castle Point, N. Y.; Jonathan Moss of Belmont, Mass.; Richard Henry Simon of Huntington Wood, Mich.; and Mrs. Joanne Peebles Wilson of Raleigh.

Duke Medical Center's prospering PEP Program which two years ago was just a novel idea for employee education, has joined with the University's Training and Development Center to form the new Office of Human Development at Duke.

As a result of the merger, PEP, officially known as "Paths for Employee Progress," expands into a University-wide program to assist non-academic employees in advancing to better jobs through education.

The formation of the new office will coordinate all employee education and training programs within the University to provide better and more varied opportunities for the advancement of all employees.

Administratively, the new office will be headed by Howard N. Lee. Lee will be responsible to Dr. Thomas D. Kinney, director of medical and allied health education.

on, and Charles Huestis, Duke's vice president for business and finance.

* * *

Recent promotions and appointments include the following:

Dr. Andrew G. Wallace was promoted to full professor and Dr. David L. Young was named an associate professor. Drs. Robert A. Gutman and Abe Walston were appointed assistant professors.

Wallace, an associate professor in the department since 1967, has been chief of the Duke Division of Cardiology for more than a year. He is also serving as assistant director for graduate medical education at Duke and is an assistant professor of physiology.

A graduate of Duke University and the Duke School of Medicine, Wallace completed his internship and residency at Duke and joined the staff as an assistant professor in 1965. In 1967, he was promoted to associate professor and named director of Duke's heart attack research unit.

Young, an assistant professor in the division of gastroenterology since 1966, is a graduate of Bowdoin College in Brunswick, Me., and of the Southwestern Medical School of the University of Texas.

He did his internship and residency training at Yale-New Haven Medical Center and at Parkland Memorial Hospital in Dallas. Before coming to Duke, he spent several years in postdoctoral research at the Max Planck Institute in Munich, Germany, and later at Yale University.

Gutman, with both bachelor's and M.D. degrees from the University of Florida, comes to Duke from a post assistant professor of medicine in the Division of Nephrology at the University of Washington in Seattle.

Walston is a graduate of the University of North Carolina and the Duke School of Medicine. He did his internship, residency, and a cardiovascular fellowship at Duke before joining the staff as an associate in medicine last year.

Dr. Herman Grossman, formerly on the faculty of the Cornell University Medical College, was named associate professor of radiology and associate professor of pediatrics.

Grossman, a native of Connecticut, is a graduate of the University of North Carolina. He earned an M.A. degree from the Columbia University College of Physicians and Surgeons in New York City.

He did postgraduate work in both pediatrics and radiology in New York before joining the faculty at Cornell in 1965.

* * *

Duke has named a new associate director of medical education for allied health.

He is Dr. Dale R. Lindsay, associate commissioner for science with the federal Food and Drug Administration. In that position, which he headed from 1969 until taking his Duke job Dec. 1, Lindsay was the principal scientist advisor to the commissioner of the FDA.

Lindsay succeeds Dr. Roger J. Bulger, who is be-

coming the executive officer of the new Institute of Medicine of the National Academy of Sciences, serving as deputy to the president of the 110-member institute.

Lindsay, a native of Bunker Hill, Kans., received his A.B. degree in 1937 from the University of Kansas and his M.A. there the following year. In 1943 he earned his doctorate in entomology at Iowa State College.

From 1943-1953 Lindsay was a medical entomologist for the U. S. Public Health Service. During that period he was in charge of Communicable Disease Center activities in Pharr, Tex. and Thomasville, Ga.

For the next ten years, he worked in the National Institute of Health's division of research grants and rose to chief of the division in 1960.

Lindsay retired from the Public Health Service in 1963 to become deputy to Dr. John Knowles, general director of Massachusetts General Hospital in Boston. He then moved to a position as assistant chancellor for health sciences at the University of California at Davis, a post he held until joining the Food and Drug Administration in August of 1969.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE WAKE FOREST UNIVERSITY

Dr. Ernest H. Yount Jr., professor and chairman of the Department of Medicine at Bowman Gray School of Medicine, is giving up the department chairmanship he has held for 20 years.

He has requested that he be relieved of his administrative duties in order to return to full-time teaching, patient care, and research. He also will relinquish his duties as chief of medical service at North Carolina Baptist Hospital, a position he has held since 1952.

Dr. Yount will continue to serve as chairman of the department until a successor is appointed. He will remain on the faculty as professor of medicine.

Dr. Yount was appointed to the faculty in 1948, following the completion of residency training and postdoctoral research training at the University of Chicago Medical Center.

He was named a Markle Scholar in Medical Science in 1950 and was presented the Distinguished Service Award in Medicine by the University of Chicago in 1958. He has served as director of the National Board of Medical Examiners and as chairman of the board's medical committee.

Dr. Yount holds the A.B. degree from the University of North Carolina and the M.D. degree from Vanderbilt University School of Medicine. He is a member of Phi Beta Kappa and Alpha Omega Alpha.

* * *

Dr. A. Robert Cordell, professor of surgery, is the new president of the Southern Thoracic Surgical As-

sociation. Installed at the 18th annual meeting of the organization, he succeeded Dr. Hawley H. Seiler of Tampa, Fla.

Dr. Cordell also presented a paper on "Pulmonary Artery Debanding: Surgical Considerations" at the meeting.

Dr. Cordell, who was appointed to the Bowman Gray faculty in 1957, has served on the council of the Southern Thoracic Surgical Association. He is a past president of the North Carolina Heart Association and is a vice president of the American Heart Association, representing the Mid-Atlantic Region.

* * *

Dr. C. Douglas Maynard, associate professor of radiology and associate dean for student affairs at Bowman Gray, was installed as president of the Southeastern Chapter of the Society of Nuclear Medicine recently at the organization's annual meeting in Miami Beach, Fla. He succeeded Dr. Arthur Dratz of Atlanta.

Two other Bowman Gray radiologists also were elected to offices in the chapter. Dr. Richard L. Witcofski, associate professor, was re-elected secretary and Dr. Robert J. Cowan, assistant professor, was named chairman of the program committee.

Both Dr. Witcofski and Dr. Cowan presented papers at the annual meeting. Dr. Witcofski spoke on "Principles of Autoradiography" and Dr. Cowan discussed "Radionuclides Used in Organ Imaging."

Bill D. Glance, director of the Office of Information and Publications at Bowman Gray School of Medicine is the recipient of the first Award for Excellence in Medical Education Public Relations presented by the Association of American Medical Colleges.

The award, which included a \$500 prize, was presented at the 82nd annual meeting of AAMC in Washington, D. C.

The public relations awards program is designed to encourage member institutions to maintain high-quality public relations programs and to create a body of literature concerning the practice of medical education public relations.

The Bowman Gray entry was a case study of a program designed to increase understanding of the needs and problems facing the medical school at a time when all medical schools, particularly private medical schools, were facing serious financial problems.

* * *

Dr. Harold D. Green, professor and chairman of the Department of Physiology, has been invited to serve on the Landis Award Committee for the Microcirculation Society.

* * *

Dr. Frank C. Greiss Jr., professor of obstetrics and gynecology, has been elected chairman-elect of the Southern Medical Association's Section on Obstetrics. He has been secretary of the section for the past year.

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Card McGraw, Ph.D.
David F. Strahley, Ph.D.

Don Phillips, Administrator
R. Lindsay Shuff, M.H.A.
Asst. Administrator

AFFILIATED CLINICS

Bluefield Mental Health Center
525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
Leslie J. Borbely, M.D.

Mental Health Clinic
Professional Building, Wise, Va.
Pierce D. Nelson, M.D.

Dr. Charles E. McCall, associate professor of medicine, has been elected to the editorial board of *Infection and Immunity*, a publication of the American Society of Microbiology.

Dr. Eben Alexander Jr., professor of neurosurgery, presented two papers at the annual meeting of the Congress of Neurological Surgeons. He spoke on "Surgical Management of the Head-Injured Child in the Acute Phase" and "Medical Management of Closed Head Injuries."

Dr. Robert F. Bond, associate professor of physiology, recently was a visiting lecturer at Temple University School of Medicine. He gave papers on "Problems Associated with Chronic Measurement of Myocardial Function," and "Myocardial and Skeletal Muscle Hemodynamics; Substrate Utilization During Hypo- and Normo-volemic Hypotension."

Dr. Courtland H. Davis Jr., professor of neurosurgery, participated in a meeting of the American College of Surgeons recently in Atlantic City, N. J. He served on panels discussing "Spinal Cord Injuries: Initial Injury and Rehabilitation" and "Diagnosis and Treatment of Pontine Gliomas."

Dr. Francis M. James, associate professor of anesthesiology, presented a paper at the sixth annual Macklin Memorial Lectures on Respiratory Function and Disease at the Naval Hospital in Portsmouth, Va. He spoke on "Pulmonary Catastrophes in Obstetrics."

Dr. Paul M. James, Jr., assistant professor of surgery, presented two papers at the Southern Medical Association meeting in Miami, Fla. He spoke on "Partial Answer to Progressive Pulmonary Insufficiency" and "Experiences with Central Venous Pulmonary Artery Resures in a Series of 3,500 Patients."

Dr. James F. Martin, professor of radiology, was a visiting lecturer recently at the University of Virginia School of Medicine. He presented papers on "Some Observations of Atelectasis in the Newborn and Young Adults" and "Gastrocamera Observations in Some Gastric Lesions."

Dr. James G. McCormick, research assistant professor of otolaryngology, presented two papers at the 82nd meeting of the Acoustical Society of America in Denver, Colo. He spoke on "Auditory and Vestibular Effects of Helium-Oxygen Hyperbaric Chamber Dives to Confusion Depths" and "Cochlear Dysfunction Associated with Decompression from 300-Foot Hyperbaric Chamber Dives."

Four Bowman Gray radiologists participated in the meeting of the Radiological Society of North America in Chicago, Ill. Dr. Isadore Meschan, professor and chairman of the department, presided at a Radiologic

Roundtable for Residents. Dr. C. Douglas Maynard, associate professor, and Dr. Robert J. Cowan, assistant professor, gave a refresher course entitled "Evaluation of Thyroid Diseases Using Radionuclides." Dr. Maynard also presented a paper on "Teaching Medical Students Nuclear Medicine" and Dr. Cowan spoke on "Value of the Routine Use of the Radionuclide Cerebral Dynamic Study." Dr. Richard L. Witcofski, associate professor, presented a paper on "Repair and Latent Injury in Rat Liver after X Irradiation."

Three faculty members participated in the fourth annual Arterial Metabolism meeting in Lincoln City, Oregon. Dr. Richard St. Clair, associate professor of pathology, spoke on "Cholesterol Metabolism of Organ Cultures of Pigeon and Squirrel Monkey Aorta." Dr. Don Carl Jones, instructor in pathology, spoke on "Genetic Control of Arterial Metabolism." Dr. Thomas B. Clarkson, professor and director of the Department of Laboratory Animal Medicine, gave a paper on "Changes in Plaque Composition During Regression."

Dr. James F. Toole, professor and chairman of the Department of Neurology, was visiting professor of neurology for the Dr. Thomas F. Manley Postgraduate Teaching Day recently in Norwich, N. Y. He spoke on "Current Concepts in Diagnosis and Mechanisms of Transient Ischemia and Vascular Steal Syndromes."

Five Bowman Gray faculty members participated in the 44th Scientific Sessions and Annual Meeting of the American Heart Association in Anaheim, Calif. Dr. Robert N. Headley and Dr. Henry S. Miller, associate professors of medicine, served as delegates from the North Carolina Heart Association. Dr. Miller presented a paper on "Relation of Age to Electrocardiographic Changes After Maximum Stress." Dr. Thomas B. Clarkson, professor and director of the Department of Laboratory Animal Medicine, spoke on "Changes in Pathologic Characteristics and Composition of Plaques During Regression." Dr. Hugh B. Lofland Jr., professor of pathology, discussed "Regulation of Plasma Cholesterol Levels in Squirrel Monkeys," and Dr. Richard W. St. Clair, associate professor of pathology, gave a paper on "Uptake of Low Density Lipoprotein, Cholesterol and Cholesteryl Esters by Arterial Tissues."

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

A massive survey of all registered nurses in North Carolina is now underway. Called "Operation Input," the study is being done cooperatively by several nursing

groups concerned with providing the programs, services, and educational opportunities needed by registered nurses to improve patient care.

Questionnaires have been mailed to some 19,000 registered nurses asking them to express their needs and indicate priorities. The results will be utilized by educational, professional, and health planning groups to design programs and services more relevant to the needs expressed by the nurse population. A number of questions have been designed to get at needs for continuing education programs.

The idea was initiated by the North Carolina State Nurses Association. Co-sponsoring and supporting are the Schools of Nursing at the University of North Carolina at Chapel Hill and Greensboro, the North Carolina Regional Medical Program, and North Carolina Board of Nursing which provided the list of registered nurses.

Co-chairmen of the project are Dr. Eloise R. Lewis, dean of the School of Nursing, UNC-Greensboro, and Audrey Booth, director of Professional Services, NCRMP. Rose George, member of the faculty of the UNC-Chapel Hill School of Nursing, is co-investigator primarily responsible for development of the research instrument and analysis of data.

The committee wishes to urge that all nurses in North Carolina not only return their own questionnaire, but they take personal responsibility for urging nursing colleagues to do the same.

Activities of the Committee on Continuing Education for Nursing in North Carolina, a broad-based group for which supportive services were recently funded by NCRMP, are underway with the publication of two Continuing Education Bulletins, a full committee meeting held on Sept. 30, and a planning committee meeting held on Nov. 16.

The September meeting included discussion of nursing in North Carolina today and the expanded role of the nurse as one means of meeting the pressing health care needs of people. Some important issues raised by the discussion were the effect of a group role change on the roles of all nurses and other health professionals; evaluation of the nurse's current practice, and the setting of standards of practice. A meeting on Dec. 1 will follow up the discussion of the nurse's expanded role with particular emphasis on specific current educational activities in North Carolina.

In addition to setting the date and topic for the December meeting, the planning committee established broad programming for the spring of 1972. Audrey Booth, director of Professional Services at NCRMP, is chairman of the planning committee. Also serving on the planning committee are: Sarah Bolick, Hospital Inservice instructor, Caldwell Community College; Dr. Susanna Chase, director, Continuing Education Program, School of Nursing; Ruth J. Harris, assistant professor, Continuing Education Program, UNC School of Nursing; Helene Tighe, mental health nurse consultant.

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tant, N. C. State Board of Health, and Charles Wiley, director of nursing service, New Hanover Hospital.

The committee's primary purpose is to improve communications in the state to promote continuing education in nursing. The meetings of the members serve to promote two-way communications between and among consumers and providers of continuing education for the purpose of identifying educational needs and making the most effective use of resources within the state to provide programs. The Continuing Education Bulletins are yet another communications media to serve the aims of the Committee. Members of the committee represent both consumers and providers of continuing education for nursing. Each of the Governor's multi-county planning regions is represented to assure statewide communication and feedback.

* * *

The latest version of *Select-A-Meal*, a personal meal plan for use by health professionals in dietary management of diabetes, is now available. Copies may be obtained for \$3.12 each by writing the new office of the North Carolina Diabetes Association at 412 West Franklin Street, Ogburn Building, Chapel Hill, N. C. 27514.

* * *

A *Directory of Health Education Resources of Member Agencies of the North Carolina Health Council* was published recently. The directory, which was printed as a health education service by N. C. Blue Cross-Blue Shield, contains the address, purpose, educational and information resources, procedures for securing service, and contact for thirty-four member organizations. Dr. Lee Holder, director of NCRMP's Planning and Evaluation Division, contributed to the development of the directory, which includes a description of NCRMP.

* * *

Forty-four health educators attended the annual meeting of the North Carolina Association of Health Educators held at the Teer House in Durham, home of NCRMP, on Friday, November 19. NCRMP was the discussion topic for the group, which showed much interest in and knowledge about the role of RMP in North Carolina and current NCRMP programs of relevance to health educators. Dr. F. M. Simmons Patterson, executive director of NCRMP, and other NCRMP staff members spoke and answered questions on various aspects of the development and current status of NCRMP. A slide presentation on NCRMP and small discussion groups followed.

NORTH CAROLINA SOCIETY OF INTERNAL MEDICINE

The annual joint meetings of the North Carolina Society of Internal Medicine and the American College of Surgeons was held in Chapel Hill Dec. 10.

The meeting was highlighted by presentations from

Blaine Z. Hibbard, M.D., secretary-treasurer, American Society of Internal Medicine, Kansas City, Mo., and by Hugh R. Butt, M.D., president, American College of Physicians, Mayo Clinic, Rochester, Minn.

Drs. James Bryant and John Sessions were co-chairmen of the program committee.

At the annual business session of the North Carolina Society of Internal Medicine, held Dec. 1, the following officers were elected: president—E. Thomas Marshall, Jr., M.D., Wilmington; vice-president—Charles Herring, M.D., Kinston; president-elect—T. Reginald Harris, M.D., Shelby.

Executive Council members for terms expiring in 1974 were: Drs. E. Harvey Estes, Durham; John Sessions, Chapel Hill; Charles Farmer, Charlotte; Roy Agner, Salisbury; and John L. McCain, Wilson, who was reelected secretary-treasurer.

Dr. Norman H. Garrett, Jr., the retiring president, was commended for the outstanding job he has done during the past year.

Dr. Joseph Stevens is Governor of the North Carolina Branch of the American College of Physicians.

AMERICAN ASSOCIATION OF BLOOD BANKS

The American Association of Blood Banks (AABB) is launching a massive nationwide public education program to recruit more voluntary blood donors. A major purpose of the effort is to eliminate the high risks of hepatitis or other infections associated with the use of blood obtained from paid donors.

The new program was announced by Dr. William G. Battaile, AABB President, and Mrs. Bernice M. Hemp-hill, AABB Treasurer, and chairman of its National Clearinghouse Program, which was established in 1951 as the first cooperative system for the exchange of blood and blood donor replacement credits between blood banks throughout the United States.

NATIONAL INSTITUTE OF MENTAL HEALTH

A study to evaluate a simple chemical test for assessing the potential efficacy of certain drugs proposed in the treatment of depression has been announced by HEW's National Institute of Mental Health, Health Services and Mental Health Administration.

The first year's research will be supported by a \$45,601 grant.

The study focuses on monitoring the pharmacological activity of the tricyclic drugs commonly used in

treating depression. These include imipramine, amitriptyline, and others.

The project director is Dr. Seymour Rosenblatt of the Mount Sinai School of Medicine, New York City. He says that a better understanding of the pharmacological activity of these tricyclic antidepressants could lead to furthering "our understanding of some of the biochemical aspects of depression."

First Veterans Administration Hospital Training Center Built in Durham

In October, the Veterans Administration officially dedicated a new building in Durham, North Carolina. The steel structure . . . and its purpose . . . offer significant advances in the nation's health care system.

The two-story, 16,000-square-foot facility, adjoining the Veterans Administration's 500-bed hospital, houses its first educational center for the allied health professions. The building itself features exterior and interior walls of porcelainized steel. These are not only maintenance-free but permit a flexibility of layout to accommodate change as it becomes necessary.

Actually, the building is the prototype or forerunner of what may become a nationwide network of these compact sheet steel structures. Some will be designated for training purposes, with others serving as extended treatment centers in conjunction with the major hospitals in each VA complex.

The first of this national group is the Durham fa-

cility. When in full operation, it will train 325 students annually. It employs 25 full-time members of the teaching staff, supplemented by instructors from the Duke University medical school, and will concentrate on nine classifications of allied health care. Among its most important disciplines is the training of physicians' associates, to help ease the burdens on the nation's doctors.

The structure was designed by Titan Environmental Construction Systems, of Baltimore, adhering closely to VA specifications, with Titan supplying building components to the general contractor, Kayhoe Construction Corp., of Richmond, Va.

Says Richard A. Perez, Titan's director of operations: "By using standard structural components and systems we have developed in erecting more than 50 schools, basic construction took less than four months. The total cost to the Veterans Administration was only \$500,000. For this, they received the building, all interior walls and corridors, ceiling and lighting systems, all electrical and plumbing, laboratory fixtures, full air conditioning, (with individual room or zone temperature controls), heat and ventilating systems, and inside carpeting."

The key to the building's strikingly-modern appearance and anticipated longevity is porcelain on steel. In this material, glass-like porcelain enamel is permanently fused to steel at high temperatures, so that it becomes a part of the metal, not just a coating or surface treatment. Employing AllianceWall porcelain-on-steel panels that are guaranteed color-fast for 10 years and durable for 50 years, the 48-foot by 160-foot (per floor) fire-resistant facility is the first VA steel building and the only one utilizing other than conventional brick-and-mortar construction.

Importantly, the four-foot by nine-foot, matte finish panels are demountable and relocatable for interior design flexibility. The fact is that only two rooms — the main lecture hall and a 50-student classroom — will have fixed seating. All others are adaptable to changing needs. For example, the first such alteration will be removal of panels between two adjoining student lounges to make one large lounge area.

Another major advantage is that all walls need no maintenance but an occasional wipe-away of stains with a damp cloth. A minor attribute, but valuable to the teaching function, is that all steel walls can also be used as bulletin boards because they support papers with magnets. Even the porcelainized steel chalkboards, in the classrooms, entail this feature.

The building's exterior, of curtain wall style, is an insulated double wall system. The exterior face panels are of 28-gauge porcelainized steel panels that withstand all climatic conditions.

According to Titan's Perez, in cost of construction the building averaged out to about \$31 per square foot. He states that a laid-in-place brick exterior building, with gypsum board interior partitions, would have cost considerably more and taken up to one year to build.

The half-million-dollar construction figure becomes more impressive when one realizes that the exterior steel shell houses a layout that is custom-designed for it



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Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur with relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain,

arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midafternoon to overcome night hunger. Use in children under 12 years of age is not recommended.

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medical education function. This interior encompasses a main lecture hall, seminar room, class and conference rooms, laboratories, an audio library, administrative and teaching staff offices, and special storage sections, as well as stairways, corridors, lounges, and rest rooms. In fact, the facilities have been so carefully designed that the center could accommodate 1,000 students if operated on a day and evening schedule.

Currently, the various courses that are offered entail either one- or two-year study programs. Eventually,

the new VA training center hopes to set up a Bachelor of Health Sciences degree program. Entering students would have completed two years of college before undergoing a two-year course at the center. Included in the instructional facilities is a television hookup that permits VA students to watch Duke University medical lectures, and vice versa. Ten individual teaching carrels, with slide and audio equipment, permit self-education of students in particular subjects, to economize on teacher time.

Month in Washington

With the exception of House-Senate conference resolution of legislation designed to step up the nation's efforts to find a cure for cancer, the 92nd Congress' activity in the area of health legislation in this session has probably ended.

Senate consideration of the Social Security Amendments (Medicare and Medicaid changes) has been postponed until after the first of the New Year and the House Ways and Means Committee hearings on national health insurance have come to a halt after six grueling weeks and executive sessions will not be scheduled until early 1972.

The House approved 350-5 an expanded \$1.6 billion cancer research program within the National Institutes of Health. The bill differs from a Senate measure which provided that the head of the National Cancer Institute report directly to the White House, by-passing the NIH director. Under the House bill, the Cancer Institute head would be elevated to associate director of NIH and the cancer budget would be handled separately by the President's Office of Budget and Management. A House-Senate conference must now determine how to reconcile the important organizational differences in the measures.

The Senate's reluctance to come to grips with the Social Security Amendments of 1971—unfinished business in the last session of the previous Congress—has been attributed to wide disagreement among members as to how to proceed with that portion of the proposed legislation that would establish a new family assistance welfare plan.

On the positive side, however, with respect to the 92nd Congress' attention to health matters is its success with legislation designed to sharply increase the training of physicians, nurses, and other medical personnel.

On signing this legislation, President Nixon called on

Congress to appropriate \$350.2 million in additional funds to pay for the program for the rest of the fiscal year that runs through June 30, 1972.

Dr. Merlin K. DuVal, assistant HEW Secretary for Health and Scientific Affairs, said the nation faces a shortage of 50,000 physicians and as many as 200,000 nurses by the end of this decade unless action is taken.

DuVal said the legislation could increase by about 1,200 first year enrollment of physician candidates in medical schools next year, a 10 per cent increase in the first year places.

The American Medical Association's testimony before the House Ways and Means Committee hearings on national health insurance attracted for one of the few times during the marathon sessions most of the Committee members, though Chairman Wilbur Mills was away on the campaign trail.

The AMA urged adoption of its national health insurance proposal—Medicredit—as a program that “can be put into operation now.”

The AMA proposal, which offers both basic and catastrophic coverage for all Americans not covered by Medicare, was set forth in testimony before the House Ways and Means Committee by Dr. Max H. Parrott, Chairman of the AMA Board of Trustees, and Dr. Russell B. Roth, Speaker of the AMA House of Delegates.

“I do not want to suggest to this Committee that our present system of health care is perfect. It is not. It needs modification and change. And it will serve people better with the kind of government supported health insurance we propose in our Medicredit bill,” Dr. Parrott told the committee.

“It (Medicredit) avoids the mistake inherent in proposals such as H.R. 22 (the Kennedy-Labor bill), which would lock medicine into a rigid, monolithic, no

choice, bureaucratic system before there is any real evidence that it would make things better," he said.

In contrast to H.R. 22, Dr. Roth stated, Mediredit builds upon outstanding accomplishments of American medicine "which has shown a capability of being the best in the world."

The AMA Mediredit proposal, whose 160 sponsors in Congress are the most for any national health insurance, proposal, would provide both basic and catastrophic coverage for all Americans under age 65. (Medicare would continue for all those over 65). It is based on a system of tax credits with the government paying the cost for those who have little or no income. The government would also pay the premiums on the catastrophic coverage for all citizens. (The AMA estimates Mediredit would cost about \$14 billion a year. H.R. 22 would cost at least \$60 billion a year in new tax money, according to a recent study by the Department of Health, Education and Welfare).

Under its basic coverage, Mediredit provides comprehensive benefits in respect to hospital inpatient and outpatient services, as well as full physician services. Its catastrophic coverage includes full hospitalization and additional extended care, with a continuation of outpatient services and full physician services.

"It puts these benefits within the reach of all Americans under age 65 as a prepaid insurance package," Dr. Roth told the committee. "The benefits are uniform for all citizens under the program. For those with little or no income the cost would be borne by the federal

government from general revenues. For those with a capability to pay part of the costs, the program is realistically geared to encourage them to do so. The motivation for participation would, we believe, be especially strong because of our incorporation of tax credits."

Dr. Parrott, in his testimony, drew the attention of the committee to many achievements in American medicine. Among others he cited the 25% drop in the nation's infant mortality rate in the last decade and the steady growth of life expectancy in the U. S. as evidence "that American medicine—our pluralistic, evolving, pragmatic system—is changing things for the better, that we are making progress."

* * *

The American Hospital Association told the House Ways and Means Committee hearings on national health insurance that its Policy Statement on the Provision of Health Services provides a direction for national health policy and serves as the basis upon which the Committee can frame goals and programs for the nation's health care.

Jack A. L. Hahn, the AHA's president, told the committee that once goals and priorities have been set "what needs to be done is to embark immediately on a rationally staged program within an overall framework of established goals and objectives. Government must take the lead in providing the framework for required changes."

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Elsewhere on Capitol Hill, the AMA told the Senate Health Subcommittee headed by Senator Edward Kennedy that is now exploring the feasibility of Health Maintenance Organizations that "the concept of the HMO has not yet been tested."

"Our strong recommendation is that we find out whether economics can be achieved before such a major commitment is made," declared Dr. John R. Kernodle, vice chairman of the AMA Board of Trustees.

Stressing that the AMA supports and encourages further experimentation with HMO's, Dr. Kernodle said "HMO's are just one form of health care delivery and no one knows at this time just what impact they will have or how successful they will be in universal application."

With reference to the Nixon Administration's announced goal to make HMO's available to 90% of the population within a decade, Dr. Kernodle said:

"To us, (AMA) this is an open-ended commitment. Because of the many unknown factors regarding HMO's we feel it is a rather dangerous blank check for the Congress to issue. For any time you are talking about a program that will affect 90% of the people, you are, in fact, inaugurating a new medical system. It would seem to be the better part of wisdom to be certain of all the facts and cognizant of all pitfalls before embarking on such a course."

* * *

President Nixon has appointed a 21-member Committee on the Health Services Industry to oversee inflation in health care costs as part of the Phase 2 economic program. Chairman of the advisory group is Mrs. William C. Dunn, Commissioner of the Department of Consumer Protection for Connecticut.

The Administration intends to cover physicians' services as well as those of all other providers of services in the cost control effort, but the manner in which this will be carried out has not yet been established.

While the government obviously can control to some extent payments in federal programs such as Medicare, especially for hospitals, regulating physicians' fees in the private sector is something else again. Apparently, a major thrust of the Phase 2 program as it affects physicians will be to urge voluntary compliance.

The Administration's aim is to keep charges from rising to a point where the unit profit is higher than it was in the past. Fee rises stemming from higher costs of doing business will be okay as will a certain percentage to take into account general rises in the cost of living.

The lack of a penalty-backed policing role by the government—at this date anyway—might seem to make the federal program toothless. But Administration of-

ficials are confident that public concern and public and peer pressures will make it difficult for individual physicians to hike fees substantially. Furthermore, the Administration is certain that most physicians are willing to cooperate.

Four physicians are on the panel, which also includes representatives of state and local government, consumers, hospitals, related health occupations and industries and the health insurance companies.

Physician members are: William Lotterhos, MD, President of the American Academy of General Practice and former chairman of the AMA's section on General Practice; James Haviland, MD, former acting dean of the University of Washington School of Medicine; Earl Brian, MD, Director of the California Department of Health Care Services; and James Cowan, MD, Commissioner of Health for the state of New Jersey.

C. Joseph Stetler, President of the Pharmaceutical Manufacturers Association and former General Counsel for the AMA, is also a committee member.

* * *

The decision of HEW to kill the Public Health Service's commissioned corps is sure to fan congressional interest in a separate department of health.

HEW Secretary Elliot Richardson said he was adopting a special advisory commission's recommendation of last summer that the corps—composed of 5,500 physicians, dentists, engineers, nurses, pharmacists, veterinarians—be phased out and replaced with a civilian system.

While this would solve a serious internal personnel problem at HEW, the move does nothing to further Richardson's relations with Congress which has had a soft spot for the PHS Corps for many years.

Until recent years, the corps functioned as a semi-autonomous unit at HEW, with the PHS Surgeon General reporting directly to Congress, thus to some extent bypassing higher authorities at HEW. A close liaison with Congress was built up and still lingers on, hence the outcry when the Administration recently moved to close down PHS hospitals.

The reorganization of HEW carried out under HEW Secretary John Gardner firmly placed the secretary and assistant secretaries in control of the agency's health programs and diluted the powers of the Surgeon General to the extent that they are now difficult to define.

However, memories of the old days when Congress was able to call the shots at PHS remain strong and are one reason why such influential men as Rep. Paul Rogers (D., Fla.) are set on establishing a separate, cabinet-level department of health. The reasoning is that only this would give Congress the power it seeks over how the federal government administers its huge health empire.

Mankind are extremely fond of every thing that promises a sudden or miraculous cure. By trusting to these, they often lose their lives, when a regular course of medicine would have rendered them absolutely safe.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 335.

Book Review

Review of Physiological Chemistry. By Harold A. Harper, Professor of Biochemistry, University of California School of Medicine. Thirteenth Edition. 529 pages. Los Altos, California: Lange Medical Publications, 1971.

At medical schools across the country, regardless of the assigned text, freshman biochemistry students are seen to be carrying a brown soft-cover book. This year will be no different, except that the 13th edition of Harper's *Physiological Chemistry* will have replaced the 12th edition, and a goodly number of departments have decided to bow to the inevitable and make this book the assigned text, on the assumption that it is the only one the students will read anyway. Thus the faculty are belatedly coming to recognize what the students have known for some time—Harper's is a fine textbook for medical students. It is concise, readable, and medically oriented; three attributes infrequently found in textbooks of biochemistry. At the same time, it is remarkably complete (in spite of its title, "Review of

Physiological Chemistry") and up-to-date by virtue of a revision every two years. This latest revision has resulted in a complete re-setting of the format, resulting in the saving of a few dozen pages. More importantly, a number of topics have been completely revised and updated. For example, the chapter on Chemistry and Function of Hormones has been re-written with a greater emphasis on recent developments such as the "second messenger" mechanism of hormone levels, formation of insulin from proinsulin, etc. Many of the references given at the end of this chapter are to articles published as late as 1970.

In short, this book serves as an excellent introductory text for the more physiologic aspects of biochemistry. The 13th edition maintains the high standards set by previous editions and will undoubtedly become even more popular as the medical curriculum becomes more streamlined.

LAWRENCE DeCHATELET, Ph.D.

In Memoriam

Powell Graham Fox, M.D.

Powell Graham Fox was born in Drewryville, Southampton County, Virginia, on September 15, 1899; the son of John Powell Fox and Lula Robinson Fox. He was the eldest of their two sons and a daughter. His early years were spent on his father's spacious farm. There he made a son's usual contribution to the maintenance and operation of the estate but also found time to hunt and fish. He was particularly fond of the latter and would drop a hook when the occasion permitted throughout the remainder of his life.

Powell Graham Fox attended local schools and graduated from Drewryville High School in 1916. He then attended the College of William and Mary where he completed his pre-medical education. It was in the final year of World War I that he entered what was then the Medical College of Virginia, now Virginia Commonwealth University. During his first year there he was a member of the SATC (the Students Army Training Corps). In 1922 he received the degree of Doctor of Medicine from the Medical College of Virginia. After a year of

internship at the Retreat for the Sick in Richmond, Virginia, he successfully took the examination for licensure in North Carolina in 1923.

Dr. Fox shared his time for the next two years between Raleigh and Pennsylvania, building up to a major accomplishment which culminated in his marriage to Shirley Kingsburg of Moscow, Pennsylvania, on June 20, 1925. He then returned to Raleigh where he began the practice of medicine with particular interest in urology. In 1928, he spent a year in postgraduate training in urology at the University of Pennsylvania in Philadelphia and concurrently worked with Dr. B. A. Thomas, one of the eminent urologists of the time. In 1929, he returned to Raleigh and began a long uninterrupted period of devoted service. In June of that year he was commissioned first lieutenant in the Medical Corps, Army of U. S. Dr. Fox now affectionately known as "P. G." by his colleagues and friends, became active in professional and community affairs. He was a member of the Wake County Medical Society, the

Medical Society of the State of North Carolina, the American Medical Association, the Tri-State Medical Society, the Raleigh Academy of Medicine, the North Carolina Urological Association, the Southeastern Section of the American Urological Association, the American Urological Association (1930), the Uroline Medical Examiners Association, and the Civil Aviation Medical Association.

P. G. was a member of the Brotherhood of the Protective Order of the Elks, where he most enjoyed spending his leisure time with friends at a table of cards in a persistently not unprofitable way. He was also a member of the Carolina Country Club, the Sphinx Club, the Neuseco and Milburnie Fishing Clubs, the American Legion, and the 40 and 8 club. He was a Mason and a Shriner. He was a member of Omega Upsilon Phi and Phi Beta Pi fraternities. He was an active Methodist and not so active Democrat.

For 12 years Dr. Fox represented the Medical Society of the State of North Carolina as a member of the North Carolina Medical Care Commission. He was President of Mary Elizabeth Hospital for 25 years. In 1962 he was president of the Southeastern Section of the American Urological Association; in 1966 he was President of the Raleigh Academy of Medicine. He is attending urologist at Rex, Mary Elizabeth, Wake Memorial, and St. Agnes hospitals in Raleigh.

In his early years he made a number of contributions to the literature relating to his specialty. Among them were "Treatment of Acute Anterior Gonorrhea," *Southern Medicine and Surgery*, November 1933; "Foreign Body Around Penis," *Southern Medicine and Surgery*, 1934; "Acute Epididymitis,"

Southern Medicine and Surgery, 1934; "Lesions Producing Pyuria of the Upper Genito-urinary Tract," *Southern Medicine and Surgery*, December 1935.

Athletics and athletes were among his major interests. He was himself a golfer who won many trophies, but he enjoyed the performance of others in all sports. He gave his services in examining and caring for players on teams of elementary schools, high schools and colleges throughout his active years. He developed his own screening process for athletes, which has been expanded and emulated by many schools today.

Dr. Powell Graham Fox died early on the morning of September 26, 1971, at the age of 72. He is survived by his wife, Mrs. Shirley Kingsbury Fox; a son, Dr. Powell Graham Fox, Jr.; a daughter, Mrs. Shirley Fox Phillips of Raleigh; a sister, Mrs. Muscoe R. Pace of Richmond, Virginia; and four grandchildren.

Dr. Fox made his mark on Raleigh in a professional and community sense. In making it, he won the admiration, esteem, respect and affection of all with whom he came in contact. The membership of the Wake County Medical Society and the membership of the Medical Society of the State of North Carolina take this opportunity to express our sincere regret over his death and our profound appreciation for his services to the societies. May this statement be made a part of the permanent minutes of this Society and a copy sent to the members of his family with an added expression of our deepest sympathy to them and all who loved Dr. Powell Graham Fox.

G. W. PASCHAL, JR., M.D.

Mark Frizzelle, M.D.

Dr. Mark Frizzelle was born in Greene County, near Maury, North Carolina, on October 26, 1899, and practiced medicine in Ayden from 1907 to 1969. He suffered a myocardial infarction and a cerebral vascular accident and died on June 19, 1971.

After graduation from Ormondsville High School he entered Trinity College in Durham, where he received his A.B. degree in 1903. He entered the University of Medicine in Richmond, Virginia, and graduated in 1907. In July of the same year, after passing the examination of the State Board of Medical Examiners in June, he began the practice of medicine as an associate of Dr. L. C. Skinner in Ayden. Dr. Skinner later moved to Greenville, leaving Dr. Frizzelle to practice alone until his retirement. Even though the original building was destroyed by fire in 1913 while he was away taking a post-graduate course in obstetrics, he built a new one on the same site and occupied it for the rest of his active practice. With few interruptions, he spent the rest of his life practicing where he began.

In 1918 Dr. Frizzelle and Miss Frances Hardee of the Ormondsville community were married; she was his lifelong companion thereafter.

It has been estimated that Dr. Frizzelle delivered 6,000 babies. In 1912 he purchased the first automobile in Ayden. He kept the horse and buggy ready to use for two years before relying completely on the automobile.

When the recognition of pellagra was new, he described one such patient; he treated her and she recovered. He recognized a lithopedion by extracting part of it rectally. At his expense he took this patient to the Medical College of Virginia for successful treatment and to show her to the faculty and students. He described another patient that he treated successfully for postpneumonic empyema. He performed a thoracotomy and inserted a drainage tube. If one recalls that these diagnoses were made by clinical examination and clinical judgment, only words of praise are surely in order.

Dr. Frizzelle had a practical philosophy that combined a good medical practice with sound business. He gave generously to the Ayden United Methodist Church and to several church-supported colleges and universities, especially to Duke University. Through his generous gifts, the Ayden Little League park was built and named for him and his wife. Now

Whereas Dr. Frizzelle has departed this life, be it

RESOLVED, That the Pitt County Medical and Dental Society extend this resolution of sympathy to his wife, Mrs. Mark Frizzelle; And be it further

RESOLVED, That the original of this resolution be entered into the minutes of this society, and that copies be sent to Mrs. Frizzelle, the Medical Society of the State of North Carolina, the North Carolina Medical Journal, and the American Medical Association.

PITT COUNTY MEDICAL AND DENTAL SOCIETY

Though not one in a thousand [rabies cures] has any claim to merit, yet they are all supported by numberless vouchers. No wonder that imaginary diseases should be cured by imaginary remedies. In this way, credulous people first impose upon themselves, and then deceive others. The same medicine which was supposed to prevent the effects of the bite, when the dog was not mad, is recommended to a person who has had the misfortune to be bitten by a dog that was really mad. He takes it, trusts to it, and is undone.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 332.

Correspondence

ABORTION

To the Editor:

Dr. Jesse Caldwell's recent editorial, "Voice in the Wilderness," condemning abortion is one of the few comments on the subject I have seen recently with which I can agree.

The alacrity with which some of our colleagues have embraced this practice is appalling. Inasmuch as one of the primary functions of a physician is to save or preserve life, the motivation of those who do otherwise is in my opinion, open to serious question.

THOMAS E. SIMPSON, M.D.

Winston-Salem

Committees and Organizations

COMMITTEE ON PEER REVIEW

September 24, 1971

The following motions were approved, in effect:

That the committee be constituted as it is at the present time with a three-year tenure of office on a rotating basis, providing that where the specialties are not represented as sections of the Society, these specialties be represented by consultants.

That the committee recommend the establishment of a statewide nonprofit foundation for the peer review of quality medical care.

That the committee also recommend that a smaller, fact-finding committee be appointed for purposes of drafting such an organization's purposes and method of operation, and make a report to the January Executive Council meeting.—JOHN GLASSON, M.D., *Chairman*

COMMITTEE OF PHYSICIANS ON NURSING

September 25, 1971

On the matter of the proposed Joint Practice Commission, the following motion was unanimously passed:

That the Committee support the formation of the proposed statewide joint practice committee between medicine and nursing, and that a member of this committee be appointed to that committee to improve coordination.

The Committee recommended the following resolution

tion to the Executive Council of the Medical Society:

Whereas, Dr. Harry L. Brockmann has participated fully over a number of years with the Committee of Physicians on Nursing of the Medical Society of the State of North Carolina, and

Whereas, he has given active and aggressive leadership in improving nursing practice in North Carolina, and

Whereas, his loss is not only for medicine but for improving nursing in North Carolina, therefore be it

RESOLVED, that the Committee of Physicians on Nursing and the Executive Council of the Medical Society of the State of North Carolina extend to Mrs. Harry L. Brockmann our deepest concern and appreciation for the fine services she has performed.

JOHN N. BENNETT, M.D.
Acting Chairman

COMMITTEE ADVISORY TO THE NORTH CAROLINA DEPARTMENT OF MOTOR VEHICLES

September 24, 1971

Following a discussion of the questions on the driver's license application, the following motion was approved:

That this committee go on record as endorsing the presently used health questionnaire which is used by the Department of Motor Vehicles on applications for North Carolina driver's license.

JESSE H. MEREDITH, M.D.
Chairman

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
OCTOBER 1971 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries	Perinatal Rate	Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries	Perinatal Rate	Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries	Perinatal Rate	Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries	Perinatal Rate	Per 1,000 Deliveries
	October 1971	November 1970 - October 1971				October 1971	November 1970 - October 1971					October 1971	November 1970 - October 1971				October 1971	November 1970 - October 1971			
NORTH CAROLINA	178	1844	69626	26.5		130	1338	29733	45.0												
ALAMANCE	4	41	1267	32.4		1	15	475	31.6		PENDER		3	148	-			2	152	-	
ALEXANDER	2	17	302	56.3		1	1	31	-		PERQUIMANS		5	67	-			1	56	-	
ALLEGHANY	2	3	115	-				7	-		PERSON	1	5	280	17.9			11	228	48.2	
ANSON		6	199	30.2		1	17	295	57.6		PITT	4	14	695	20.1		4	22	686	32.1	
ASHE	3	9	308	29.2				2	-		POLK		3	137	-			1	28	-	
AVERY	2	14	258	54.3				1	-		RANDOLPH	5	44	1260	34.9			8	126	63.5	
BEAUFORT		10	421	23.8			16	244	65.6		RICHMOND		16	492	32.5			2	13	299	43.5
BEPTIE		8	67	-		1	12	241	49.8		ROBESON	2	16	650	24.6		8	76	1644	46.2	
BLADEN		9	234	38.5			7	214	32.7		ROCKINGHAM	1	41	1039	39.5		1	18	413	43.6	
BRUNSWICK		7	355	19.7			8	162	49.4		ROWAN	2	32	1223	26.2		2	15	328	45.7	
BUNCOMBE	10	68	2063	33.0		2	17	286	59.4		RUTHERFORD	1	27	743	36.3		2	5	153	32.7	
BURKE	2	25	1009	24.8		1	6	90	-		SAMPSON		2	457	-		1	21	360	58.3	
CABARRUS		19	1036	18.3		2	8	310	25.8		SCOTLAND	1	9	334	26.9		3	12	324	37.0	
CALDWELL	1	24	1143	21.0		1	3	114	-		STANLY	1	18	663	27.1		6	125	48.0		
CAMDEN		4	62	-				33	-		STOKES	2	12	402	29.9		1	2	62	-	
CARTERET	2	17	557	30.5				89	-		SURRY	1	32	855	37.4		2	2	65	-	
CASWELL	2	6	147	40.8		1	8	173	45.2		SWAIN			117	-		2	70	-		
CATAWBA	7	44	1527	28.8		1	6	223	26.9		TRANSYLVANIA	1	14	323	43.3			3	38	-	
CHATHAM		12	353	34.0		1	10	175	57.1		TYRRELL	1	1	27	-			3	37	-	
CHEROKEE	1	8	267	30.0				11	-		UNION	3	17	789	21.5		2	23	362	63.5	
CHOWAN		4	93	-		2	5	100	50.0		VANCE	1	5	304	16.4		2	16	373	42.9	
CLAY		3	86	-					-		WAKE	7	81	3161	25.6		1	47	1128	41.7	
CLEVELAND	3	38	1023	37.1		1	19	443	42.9		WARREN		3	79	-			8	182	44.0	
COLUMBUS	1	16	567	28.2		9	9	363	24.8		WASHINGTON	1	3	142	-		3	21	153	137.3	
CRAVEN	1	28	1222	22.9		1	19	404	47.0		WATAUGA	1	16	362	44.2		1	1	5	-	
CUMBERLAND	9	78	3924	19.9		8	69	1613	42.8		WAYNE	4	31	1173	26.4		2	32	644	48.7	
CURRITUCK	1	1	70	-				36	-		WILKES	4	33	863	38.2			6	73	-	
DARE		4	92	-			1	10	-		WILSON		13	509	25.5		3	22	548	46.1	
DAVIDSON	5	41	1599	25.6		3	17	266	63.9		YADKIN	1	11	376	25.3				26	-	
DAVIE	1	7	310	22.6		1	2	57	-		YANCEY		5	208	24.0				1	-	
DUPLIN	3	10	423	23.6		2	13	310	41.9		Cities										
DURHAM	5	41	1420	28.9		2	45	961	48.8		City totals are also included in county totals										
EDGECOMBE		10	430	23.3		2	24	566	42.4		ALBEMARLE		2	141	-			1	35	-	
FORSYTH	2	59	2694	21.9		4	41	1224	33.5		ASHEBORO		5	162	30.9				19	-	
FRANKLIN	1	4	190	-		1	17	242	70.2		ASHEVILLE		25	651	38.4		2	15	256	58.6	
GASTON	6	66	2675	24.7		2	19	481	39.5		BURLINGTON	3	15	513	29.2		1	7	157	44.6	
GATES			50	-				77	-		CHAPEL HILL		8	304	26.3			4	76	-	
GRAHAM		2	101	-				10	-		CHARLOTTE	9	60	3042	19.7		9	92	2095	43.9	
GRANVILLE	2	9	206	43.7			25	331	75.5		CONCORD		8	220	36.4		1	3	129	-	
GREENE	1	5	78	-			9	133	67.7		DURHAM	2	25	871	28.7		2	40	841	47.6	
GUILFORD	5	90	3685	24.4		7	85	1748	48.6		EDEN		11	206	53.4			2	63	-	
HALIFAX	3	18	416	43.3		3	30	599	50.1		ELIZABETH CITY		3	109	-			1	89	-	
HARNETT	1	21	667	31.5		3	24	318	75.5		FAYETTEVILLE	2	22	1045	21.1		6	40	615	65.0	
HAYWOOD	1	19	716	26.5			1	17	-		GASTONIA	2	23	772	29.8			8	227	36.2	
HENDERSON	1	26	693	37.5				49	-		GOLDSBORO	2	12	290	41.4		2	15	273	54.9	
HERTFORD			143	-		3	17	279	60.9		GREENSBORO	3	45	1811	24.8		4	53	1111	47.7	
Hoke		2	132	-		1	12	239	50.2		GREENVILLE	2	8	282	28.4		1	7	201	54.8	
HYDE		2	46	-			4	52	-		HENDERSON		3	141	-			6	162	37.0	
IREDELL	1	33	1001	33.0		2	15	361	41.6		HICKORY	2	11	286	38.5		1	2	107	-	
JACKSON	1	5	277	18.1			3	62	-		HIGH POINT		26	793	32.8		3	23	443	51.9	
JOHNSTON		22	860	25.6		2	24	342	70.2		JACKSONVILLE	3	12	419	28.6			2	76	-	
JONES			80	-			4	104	-		KINSTON		6	277	21.7		1	17	243	70.0	
LEE	2	7	423	16.5		2	8	212	37.7		LENOIR		2	197	-			2	52	-	
LENOIR	2	17	580	29.3		1	30	454	66.1		LEXINGTON	1	13	279	46.6		1	7	100	70.0	
LINCOLN		15	568	26.4		1	3	116	-		LUMBERTON		4	229	-		2	11	201	54.7	
MCDOWELL	2	10	530	18.9			1	52	-		MONROE	1	1	147	-		2	9	104	86.5	
MACON	1	5	220	22.7				5	-		MORGANTON	2	7	99	-			2	26	-	
MADISON	3	8	215	37.2				4	-		NEW BERN		6	182	33.0			6	147	40.8	
MARTIN	1	5	220	22.7			6	248	24.2		RALEIGH	3	43	1490	28.9		30	599	50.1		
MECKLENBURG	11	93	4811	19.3		9	103	2408	42.8		REIDSVILLE		3	159	-			6	106	56.6	
MITCHELL		7	231	30.3				2	-		ROANOKE RAPIDS	1	8	202	39.6		2	2	41	-	
MONTGOMERY		5	252	19.8					-		ROCKY MOUNT E		1	110	-		2	5	144	43.3	
MOORE	4	18	454	39.6		1	7	143	49.0		ROCKY MOUNT N		5	234	17.4		1	5	87	-	
NASH		10	604	16.6		1	12	488	24.6		SALISBURY		3	194	-		2	5	133	37.6	
NEW HANOVER	4	34	1301	26.1		2	18	451	39.9		SANFORD	1	3	159	-			3	91	-	
NORTHAMPTON		1	96	-		2	16	320	50.0		SHELBY	2	8	182	44.0		1	4	113	-	
ONSLOW	9	60	2423	24.8		2	12	407	29.5		STATESVILLE		8	241	33.2		1	5	168	29.8	
ORANGE	1	14	810	17.3		4	16	245	65.3		THOMASVILLE		6	198	30.3		2	7	92	-	
PAMLICO		2	79	-			2	76	-		WILMINGTON	2	19	597	31.8		2	17	384	44.3	
PASQUOTANK	1	9	252	35.7			5	158	31.6		WILSON		7	249	28.1		2	11	247	44.5	
											WINSTON SALEM	2	26	1303	20.0		4	38	1161	32.7	

¹ Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

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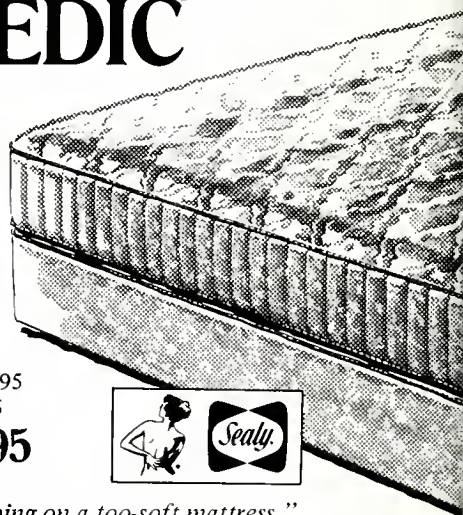
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KING SIZE 76x80" 3-pc. set \$399.95

\$99⁹⁵

Twin or full size, ea. pc.

"No morning backache from sleeping on a too-soft mattress."



SEALY OF THE CAROLINAS, INC.

(a division of the 69-year old Peerless Mattress Co.)

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HAPPY NEWS!



INTRODUCING

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PFIZER PHARMACEUTICALS
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When he goes back to work, will his old tensions go back with him?



When it's mandatory to keep the post-coronary patient calm, consider Valium® (diazepam)

Although he's promised to take it easy back on the job, you know he's going back to the same stressful circumstances that may have contributed to his hospitalization. Your prescription for Valium can calm him. Lessened anxiety and tension can help in decelerating his former pace. During the period of readjustment Valium helps quiet undue anxiety.

For moderate states of psychic tension, 5-mg or 2-mg Valium tablets *t.i.d.* or *q.i.d.* can usually provide reliable relief. For severe tension/anxiety

states, the 10-mg tablets often produce desired results.

The most commonly reported side effects are drowsiness, ataxia, and fatigue. Until individual response is determined, caution patient against driving or operating dangerous machinery.

Valium® (diazepam)

For the tense cardiac patient who must be kept calm

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation; tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures.

Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision.

Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. **Adults:** Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. **Geriatric or debilitated patients:** 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) **Children:** 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose™ packages of 1000.

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Division of Hoffmann-La Roche
Nutley, N.J. 07110

The Official Journal of THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA February 1972, Vol. 33, No. 2

NORTH CAROLINA

Medical Journal

THIS ISSUE: Fetal Indications for Therapeutic Abortion, Arthur C. Christakos, M.D.; Diagnostic Guidelines in Hydrocephalic Dementia, W. S. Avant, Jr., M.D., and J. F. Toole, M.D.; Solo Versus Partnership Practice of Dermatology in the Carolinas, Sherwood W. Barefoot, M.D.; A Survey of Hospital-Sponsored Long-Term Care Units Aided by Hill-Burton Funds, Helen N. Flythe, R.N.

FEB 10 1972

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One of the familiar line of **Cordran**[®] products flurandrenolide



200063



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Additional information available
to the profession on request.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Important Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis, a frequently dose-related reaction, may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infection is 4 tablets initially, then 2 tablets morning and evening. If pain persists beyond seven days, causes other than infection should be sought. After relief has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

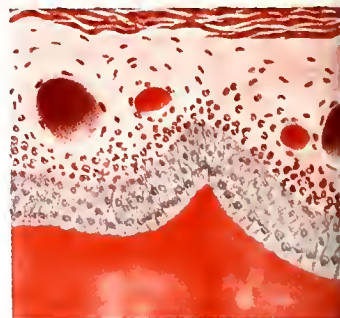
NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after ingestion.

How Supplied: Tablets, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl, bottles of 100 and 500.

Azo

Each tablet contains 100 mg phenazopyridine

for dramatic relief from symptoms within minutes



Artist's rendition of inflamed mucosa of the bladder wall



Artist's rendition of bladder with acute cystitis



PRESIDENT'S NEWSLETTER

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

p. 9

February 4, 1972

The Mid-Winter Conference for Leadership for county and state officers, committeemen, new members, and auxiliary on January 28-29, 1972, registered over 200 participants. This is the largest mid-winter meeting ever held. At Joint Conference for Hospital Trustees Administrators and Hospital Medical Staffs, discussions were held on the interfaces of the trustees, medical staffs, and administration. Richard E. Palmer, M. D., Chairman for the Joint Commission on Accreditation of Hospitals, took part in this program. Ernest B. Page, M. D., did excellent job in organizing the program on Friday. Joint conference will be held each year.

On Friday evening Ernest B. Howard, M. D., Exec. V-P., AMA, talked on "Unity Within the Profession." He stated that a "gut issue in National Health Insurance is fee for service." Max H. Parrott, M.D., Chairman, AMA Board of Trustees talked also.

The Medical Society Council met on Sunday, January 30. Items of importance were as follows:

Financial Report by T. Tilghman Herring, M. D., Chairman, revealed sufficient surplus to authorize second field representative for Headquarters Office.

E. Harvey Estes, M. D., Secretary, reported on statewide peer review foundations for quality medical care. Further discussion of this foundation will take place in Council meeting prior to annual session.

District reapportionment was discussed but as yet is unsettled. It is very difficult to get equivalent representation for each district without expanding the size of certain districts greatly. Section on Urology established.

Edgar T. Beddingfield, Jr., M. D., Chairman, Comm. on Legislation, indicated that principal national health insurance would occur in catastrophic illness and that major changes would probably occur in Medicaid and Medicare.

Excellent presentation of Model Industrial Clinic - Proposal For Innovative Occupational Health Program - presented by John L. Brockmann, M. D., Chairman of Comm. on Occupational and Environmental Health. Concept endorsed by Council.

Ben Britt, M. D., reported present status of drug abuse program and called attention to resolution in statement of policy as follows: "Resolve that the physician should exercise particular caution when prescribing drugs with high potential for abuse to prevent unnecessary amounts of the drugs being dispensed." Complete statement of policy on drug abuse available at Headquarters.

- 8) Interpreted Constitution and By-Laws at request of Comm. on Nomination to indicate that no present member of Board of Medical Examiners may succeed himself.
- 9) Endorsed Donald B. Koonce, M. D., AMA delegate, for the Joint Commission on Accreditation of Hospitals.
- 10) Endorsed request for organization of enlarged county medical society to New Hanover-Brunswick-Pender Medical Society. The latter two counties have not previously been organized.
- 11) MEDICINE IN NORTH CAROLINA report by Roscoe D. McMillan, M. D., indicated that publication in print by October 1, 1972.
- 12) Executive Council Meeting will be held on May 7, two weeks prior to annual session. Previous meeting on Saturday before the House of Delegates first meeting did not allow adequate time for preparation of reports.
- 13) Endorsed MECO (Medical Education Community Orientation) for first- and second-year medical students beginning in 1973. This is SAMA program that will introduce the student to community medical problems early in his career.
- 14) Reduced yearly dues of student membership to \$3.00 per year payable if desired at one time for four years. The Council thought that this would be inducement to attract large enrollment of students.
- 15) Reported development of information packet for students about the Medical Society to be developed by Dan Mainer.

The Medical Society - Nursing Association Joint Comm. on Nursing Practice, has held three meetings. The National Joint Practice Commission of AMA and ANA held first meeting Jan. 21. State committee has testified at state legislative research committee on the extended role of the nurse in medical practice.

FDA Drug Bulletin editorial "Isoniazid and The Liver", Dr. Gordon M. Meade stated "isoniazid remains a powerful and very effective antituberculosis agent which merits continued therapeutic and prophylactic use even though liver dysfunction can be associated with its use. The individual and the community advantages of its use overbalance the rare possible untoward reactions." He stated furthermore that the risk is small varying from 0 to 10 cases per 1000 patients per year. The report recommended that screening for liver dysfunction should be done at monthly intervals.

American College of Surgeons had 15,500 responses to a questionnaire. 73% of the surgeons indicated that peer review of surgical care is desirable for improvement of quality and control of costs. 83% favored regional coordination of hospital services to prevent duplication of expensive diagnostic and therapeutic equipment.

Best wishes and

Sincerely yours,

Charles W. Styron

Charles W. Styron, M. D.
President

CWS/ekb

P.S.: Gold and scarlet transparent cigarette lighter with skie decoration found. Please request return.

CWS

Fetal Indications for Therapeutic Abortion

Arthur C. Christakos, M.D.

ON May 9, 1967, North Carolina Senate Bill No. 104 was passed by the North Carolina General Assembly, making the amendment of Article II, Chapter 1, of the General Statutes of North Carolina the first change in the law regarding abortions since 1881. Upon ratification of this bill, physicians concerned with the care of North Carolina's women were offered still more responsibilities and trusts. Interruption of pregnancy for fetal indications as well as for other indications was no longer proscribed. In fact, criteria for therapeutic interruption were prescribed emphatically, even though in characteristic legal terms.

The wording of the law makes the added responsibility more awesome, for it places the onus squarely on the operating surgeon: "... it shall not be unlawful to advise, procure, or cause the miscarriage of a pregnant woman or an abortion when the same is performed by a doctor of medicine licensed to practice medicine in North Carolina, if he can reasonably establish that . . . there is substantial risk that the child would be born with grave physical or mental defects. . . ."

This paper will be addressed toward the terms "reasonably establish," "substantial risk," and "grave defects." Present trends since enactment of Senate Bill No. 104, past practices, and future developments in fetal indications for therapeutic interruption of pregnancy will be discussed.

It is reported generally that major defects occur in approximately 2.5 percent of all births. Any factor which tends to cause greater than this risk may be con-

sidered a substantial risk and should give reason for consideration of interrupting the pregnancy.

Major birth defects can be grouped into three broad etiologic categories. For the sake of this discussion they can be designated as viral, drug, and genetic. In recent years the public has become better informed and is making demands on the medical profession to practice eugenics in the literal sense of the word.

DUKE EXPERIENCE

The Duke experience with therapeutic abortions for fetal indications under the new legislation has been varied. In some instances indications other than fetal ones have been the primary reasons for abortion, while fetal indications have been relegated to a secondary position. Only 21 abortions with fetal indications were performed at Duke from May, 1967 (when Senate Bill 104 became law) to Jan. 1, 1971.

In keeping with the three categories outlined above, these indications can be designated as follows:

- Viral— 2
- Drugs—16
- Genetic— 3

Both abortions in the viral category were done following serologic conversions in women with clinical evidence of rubella in the first few weeks of pregnancy. Currently rubella antibody titers are determined in all patients enrolled in the Duke Prenatal Clinic. Patients with negative titers are offered rubella vaccine in the postpartum period.

The largest number of abortions for fetal indications were performed because of the risk of teratogenic effects of drugs or irradiation. In some cases in this

Read before the North Carolina Obstetrical and Gynecological Society, Durham, April 25, 1971.
From the Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, N. C. 27710.

category, various psychiatric indications were considered in addition to the strict drug indications. Two patients underwent abortion following suicide attempts in which various drugs had been used, causing prolonged periods of shock, acid-base imbalance, and coma during the first four to six weeks after the last menstrual period. In these cases we considered the fetal indications secondary to the maternal ones.

Nine patients were subjected to diagnostic irradiation, exposing the embryo to a dosage in excess of 1 rad. Microdosimeter techniques were not utilized in these calculations, but phantoms were used to reconstruct the situation, in order to document irradiation dosage for abortion to be considered.

Five patients underwent abortions because of hallucinogenic drugs. One woman was known to have used multiple types of hallucinogens on numerous occasions before and after conception. Two women had abortions because their consorts were recurrent LSD users, and two others because they themselves were recurrent users. In one of the latter, the patient's own chromosomes were normal while the fetal chromosomes could not be studied; the second had occasional chromatid breaks in her blood. Her fetus demonstrated chromatid breaks and a D/D translocation in amniotic fluid cells cultured after amniocentesis. The same abnormalities were demonstrated in fetal tissues cultured at the time of hysterotomy (Fig. 1).



Figure 1

In the genetic category, two abortions were performed because of incest. One of these patients also presented psychiatric indications. The third patient in this category was a 40-year-old woman who underwent vaginal hysterectomy at eight weeks' gestation because of an empiric risk of about 1:15 for Down's syndrome. She had already given birth to a child with this condition and actively sought interruption and sterilization because of uncontrollable anxiety about a recurrence. The products of conception were placed in tissue culture and subsequently subjected to karyotypic analysis. The chromosomes were normal 46XX.

TERATOGENIC EFFECTS OF VIRAL INFECTIONS

Until the 1967 revision of the North Carolina Abortion Act, therapeutic abortions were performed in the state ostensibly to protect the mother's life and health. In our own department five therapeutic abortions for fetal indications were recorded from October, 1961 to October, 1966, in all cases because of rubella. It is of interest that all five women were private patients. Even though rubella was not then a legal indication for abortion, the medical profession generally conceded that it could be reasonably established that the child ran a substantial risk of being born with a grave physical or mental defect, especially if the mother contracted the disease during the first six to eight weeks of gestation. Several studies¹⁻³ establishing risks of various grave defects as high as 70 percent caused many an otherwise cautious gynecologist to respond to his patient's anxious requests for abortion in spite of possible criminal litigation. Some were forthright enough to record the fetal indications, while many—probably most—circumvented the issue and chose to state "maternal health risk" as the indication for interruption. Because of this practice, it is difficult to ascertain the true incidence of therapeutic abortion for fetal indications prior to May 9, 1967.

By relying on the experience of investigators such as Lock and others,¹ Campbell,² and Pitt,³ it has been possible to establish, reasonably, that a substantial risk of grave mental and physical defect exists for the child whenever a gravid woman contracts rubella. The delay in establishing the legal machinery to cope with such problems caused the public to demand changes in our statutes so that interruption could be considered on fetal grounds alone. Now one is faced with another responsibility—namely, the accurate diagnosis of rubella. When the clinical picture is in doubt, a rubella antibody titer can be obtained to establish recent challenge by the rubella virus. Serologic conversion with at least a fourfold increase in titer within three weeks is usually considered indicative of infection. This may well protect normal fetuses that otherwise might be at risk of abortion on clinical impression as the only criterion for diagnosis of rubella.

According to Campbell,² the degree of risk is inversely related to the duration of gestation at the time

Table 1
Relation of Risk to Duration of Gestation

Gestational Age in Weeks	Percent Risk
0- 4	30-70
5- 8	25-55
9-12	20-40
13-16	10-25

e mother contracts rubella (Table 1). During the first four weeks the risk seems to be 30 to 70 percent. During the second four weeks it is 25-55 percent; during the third four weeks, 20-40 percent; and during the fourth four weeks, 10-25 percent.

The gravity of defects resulting from maternal rubella is unpredictable and may include more than deafness, ocular defects, and congenital heart disease.⁴ Long-term follow-up studies have revealed previously unrecognized manifestations of rubella, which add to the overall risk as well as to the variety of anomalies resulting from this disease.⁵

According to Kaye and Reaney,⁶ viral diseases other than rubella play a small role in the overall etiology of congenital anomalies. The degrees of risk quoted by these authors are listed in Table 2. The same conclusion concerning viruses other than rubella was reached at a conference on the Viral Etiology of Congenital Malformations sponsored by the National Institutes of Health in 1967.⁷ Some virologists feel that viruses other than rubella are so virulent that they destroy the embryo rather than maim it. In view of the liberalization of abortion laws, the risk of major congenital defects should be considered on an individual basis. Where viral diseases are known to occur in epidemic proportions, the pregnant woman affected early in gestation should be given the most careful consideration for interruption of pregnancy if she does not abort spontaneously, which seems to be the rule with viral infections other than rubella.

TERATOGENIC EFFECTS OF DRUGS

Obstetricians are well aware of the danger of drug effects in early pregnancy, especially since the thalidomide tragedy in the early 1960's. Taussig⁸ emphasized that the size of the dosage did not affect the results. The syndrome of phocomelia occurred after a single dose of 100 mg taken prior to the forty-second day after the first day of the last menstrual period. The drug has no known effect on animals, and is considered to have a wide range of safety, being prompt in its sedative action and having no hangover effect.

Table 2
Incidence of Birth Anomalies Following Viral Diseases During Pregnancy

Disease	Incidence of Anomalies %
Mumps	13.0
Measles	7.0
Varicella	5.7
Polymyelitis	1.6
Influenza	4.1
Infectious hepatitis	4.3

Since the thalidomide reports, most pharmaceutical firms have added to their package inserts "not recommended for use in pregnancy." In reality little is known of the teratogenic or adverse effects of drugs, as is well pointed out by Takata,⁹ who compiled a list of drugs that have been reported as harmful to the human fetus. He emphasized the significance of the defects allegedly resulting from the use of specific drugs, giving references for each drug reported. He categorized the drugs according to type—analgetics, anticarcinogens, and so forth, taking care to distinguish between the effects of drugs in human fetuses and other species.

The teratogenic effects of few drugs are well documented, as Takata's article points out. Of special interest are the antimetabolites (used in treating cancer), depressants, and psychedelic drugs. Most of us have become sensitized to the virilizing effects of some progestogens, but the degree of the defect probably does not warrant consideration of abortion.

Whether a drug adversely affects the fetus depends on several variables, including the type, dose, time of administration, and the species involved. In many instances incriminating drugs are based on one or two reports or on animal studies. The latter cannot be applied to the human situation because of different metabolic pathways and enzyme systems, and because of doses considerably in excess of those used in humans. My philosophy allows me to use any drug or mode of treatment deemed necessary to safeguard the mother, regardless of the possible adverse effects on the fetus. In other words, the decision to treat or not to treat does not depend on whether the mother is pregnant, if a specific treatment is truly necessary.

The use of irradiation can be made analogous to drug usage; that is, there is a dose-time relationship. In human beings, Wolf¹⁰ sees little likelihood that malformations would result in a developing fetus from irradiation administered at any time during pregnancy if the dose does not exceed 25 rads. According to Reed,¹¹ the National Research Council Committee has estimated that 30 to 80 rads delivered to the gonads constitutes a "doubling dose"—that is, a dose doubling the spontaneous mutation rate from all causes over what it had been in the past. The Committee recommended 10 rads to the gonads from conception to the age of 30 years as a "maximum permissible dose."

Measurements of irradiation to the fetus have been lacking in accuracy until recently because of the techniques employed in calculating doses to the fetus. Covington and Baker,¹² utilizing microdosimeters in the vagina and rectum in a pregnant patient being treated with irradiation for mediastinal Hodgkins' disease, found that for each rad given to the mediastinal tumor, the three-month fetus received 0.0026 rads—7.9 rads for the 14 treatments or 3500 rads delivered over a period of 3½ weeks.

Phantom dosimeter studies were in close agreement. The fetus was delivered at term in good condition. At one year the baby remains healthy. Whether leukemia

develops later is of remote relevance to the question of interruption of pregnancy at this point.

In 1962 the International Congress on Radiation Protection made the following recommendation as reported in *Radiology* in 1969:

With a radiation dose of 1 rem or less, there is no need for therapeutic abortion. With a dosage of from 1 to 10 rem, there is an individual evaluation with abortion probably advisable. With a dosage of over 10 rem, then there is a definite indication for therapeutic abortion.¹³

GENETIC FACTORS

Hereditary illness has long fascinated investigators of fetal and neonatal pathology. Empiric risk figures for various hereditary defects have been calculated and have been used in counseling parents of affected children when the question of starting another pregnancy has been raised. If the risk to the fetus in a subsequent pregnancy has been used as an indication for therapeutic interruption, it has been concealed by the "maternal risk" indication. Even in those conditions where the risk is as high as 1:4 to 1:2 as in autosomal recessive and autosomal dominant or X-linked recessive disorders, respectively, the indication listed for interruption has been "risk to maternal mental health."

More defects of genetic origin are being recognized and are properly designated as the indication for interruption. Generally speaking, autosomal recessive traits are considered rare, but severe. Because both parents are carriers, autosomal recessive traits have a 1:4 chance of recurrence. Before therapeutic abortion is recommended for such risks, one must make certain of the diagnosis of the affected offspring. Liberal use of consultation with geneticists and with the literature is strongly urged.

As a rule most autosomal dominant disorders are mild and somewhat more common than autosomal recessive ones. On occasion, however, an autosomal dominant disorder may be disabling and wrought with unsurpassable obstacles to a normal life. Depending upon the degree of expressivity of a dominant trait, one or the other parent is affected, thereby producing a 1:2 risk of each offspring being similarly affected. At times there may be delay in the manifestation of a severe dominantly inherited trait to an age beyond reproductive ability. For example, whenever Huntington's chorea appears after the age of 35 years most families are already completed and the children of that family each have the unpleasant expectation of mental deterioration in their middle years at the risk of 1:2. Interruption of any pregnancies involving the children of a victim of Huntington's chorea seems an expensive price to pay for lack of what we call "prevention."

X-linked traits vary in severity, ranging from relatively mild color blindness to potentially fatal hemophilia among the male offspring of female carriers of the mutant gene. Heterozygous females (or carriers) have a 1:2 chance of producing affected sons, since their X chromosomes are randomly distributed to their offspring, and the male embryo has only a relatively

small Y chromosome with no counteracting gene locus.

By the same mechanism, the female offspring of the carrier mothers run the same risk as their mother (1:2) of becoming carriers. Since they are not affected female fetuses should not be aborted. The sex of the fetus can be determined accurately by amniocentesis: with proper staining, sex chromatin masses can be seen in the nuclei of females but not in males. Fuchs¹⁴ has used this method to determine whether a particular pregnancy should continue or not.

Chromosomal aberrations present a different problem. The most common chromosomal anomaly associated with severe defects is Down's syndrome (mongolism). Empirically there is a steady rise in the incidence of Down's syndrome in children born to women after the age of 35 years. At any maternal age, the risk of recurrence of this form of retardation is increased about fivefold. These risks were the sole grounds for deciding whether to interrupt or to continue pregnancy. Jacobsen and Barter¹⁵ demonstrated the technique of culturing amniotic cells obtained at amniocentesis. Karyotypic analysis of these cells has offered more accurate diagnosis of fetal Down's syndrome upon which to base a decision for abortion.

The procedure of amniocentesis is a well accepted tool since the amniotic cavity is no longer off limits to the obstetrician. Chromosomal analysis of cells derived from amniocentesis is widely used. We have had limited experience within our own department with chromosomal analysis from amniotic cells but we are finding the technique relatively simple with the results easy to interpret and reliable. Any laboratory performing karyotypic analysis using tissues other than blood should be able to carry out the procedure with minor adjustments in the laboratory technique.

FUTURE DEVELOPMENTS

More sophisticated methods of diagnosing viral diseases are in the offing. Serologic testing will determine whether a pregnant woman has had a particular viral disease. Rubella vaccines are already available, so that in the next generation one may expect no further congenital defects caused by so mild a disease as German measles. Limited amounts of the attenuated virus vaccine have been released with warnings not to vaccinate women who may become pregnant within two months. It is further recommended that serologic titers of rubella antibodies be less than 1:10 before vaccination.

Prospective drug studies in human beings will have to be done before the full impact of drug effects can be realized. Continued study of isolated case reports will give more understanding of teratogens in the pharmaceutical area.

Finally, detection of rare autosomal recessive, autosomal dominant and X-linked recessive disorders will be safely made prenatally. Already Nadler and Gebie¹⁶ have been able to demonstrate detectable levels of 11 enzymes in human amniotic cells obtained by amniocentesis as early as the twelfth week of gestation.

Since many autosomal recessive disorders are associated with enzyme deficiencies, this technique will offer a more accurate means of diagnosis, thus obviating the interruption of pregnancies based on the 1:4 risks expected in autosomal recessive disease.

CONCLUSIONS

Application of refined techniques are bound to open more ways to antenatal detection of grave defects of the fetus so that the physician may reasonably establish a substantial risk to aid him in his decision to practice eugenics in the strict sense of the word. The corollary to this would be that fetuses in whom no risk can be established would be spared.

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DISCUSSION

Dr. Christakos is to be commended for his thorough study oriented toward establishing criteria for therapeutic abortion in North Carolina. I was a member of our committee on therapeutic abortion and sterilization at Southeastern General Hospital in Lumberton at the time that Senate Bill No. 104 was passed, and I am well aware of the confusion created by

such simple phrases as "reasonably establish" and "substantial risk."

A review of statistics at Southeastern General Hospital since 1967 indicates that seven abortions have been performed primarily for fetal indications. Dividing these indications into the three categories used by Dr. Christakos, viral infections composed the largest group. Five abortions were performed because of rubella during the first trimester of pregnancy. In three of these five cases serologic conversion occurred, with a fourfold increase in titer within three weeks. The remaining two abortions were done on the basis of clinical impression alone. The general availability of determinations of rubella antibody titers should make abortion on the basis of clinical impression alone unnecessary. Currently, all rubella antibody titers are obtained routinely in all pregnant patients seen in our office, and usually from our gynecologic patients who are in the child-bearing age and have not been evaluated previously.

Patients with negative titers are offered rubella vaccine either in the postpartum or preconceptional period, providing adequate contraceptives are being used. Rubella immunization may itself become an indication for therapeutic abortion. I have one patient who received rubella vaccine after taking oral contraceptives for five months. It was later found that she had been pregnant for about three weeks when she was vaccinated. This fact was considered sufficient indication for abortion.

The remaining two abortions performed were in the drug category. The procedures were performed actually for psychiatric indications, but in each instance large amounts of psychedelic drugs had been ingested in the early stages of pregnancy and were a major consideration.

It is significant that while radiation and genetic factors were a major indication for therapeutic abortions at Duke University Medical Center, they were not listed as reasons for the procedure at our institution during a similar period of time. I suspect that most patients with these indications are being referred to larger medical centers for further evaluation prior to abortion.

Transabdominal amniocentesis and amniotic fluid analysis are a most significant development in the efforts to assess fetal status and are commonly used at our hospital to evaluate problems of erythroblastosis fetalis. In our office, if more extensive analysis of amniotic fluid is suggested during pregnancy because of family history, past reproductive performance, or maternal age, the patient is referred to another institution for further evaluation. As this method becomes generally available, some of the gamble will be removed from genetic counseling and better acceptance on the part of patients and physicians can be expected.

The practice of eugenics is every physician's responsibility, and Dr. Christakos' excellent paper will make this responsibility somewhat easier for each of us.

ARLIE H. WESTFALL, M.D.

It is unfortunate for the cure of [syphilis], that not one in ten of those who contract it, are able or willing to submit to a proper plan of regimen. The patient is willing to take medicine, but he must follow his business, and, to prevent suspicions, must eat and drink like the rest of the family. This is the true source of nine-tenths of all the mischief arising from the venereal disease. I never knew the cure attended with any great difficulty or danger where the patient strictly followed the physician's advice; but a volume would not be sufficient to point out the dreadful consequences which proceed from an opposite conduct. Schirrous testicles, ulcerous sore throats, madness, consumptions, carious bones, and a rotten progeny, are a few of the blessings derived from this source. —William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 354.

Diagnostic Guidelines in Hydrocephalic Dementia

W. S. Avant, Jr., M.D., and J. F. Toole, M.D.

ABOUT 20 years ago a new cause for dementia was recognized: normal-pressure hydrocephalus. In 1954 Strain and Perlmutter¹ reported that dementia secondary to hydrocephalus caused by subarachnoid hemorrhage was sometimes improved by ventriculo-subarachnoid shunting. It is postulated that progressive hydrocephalus was secondary to adhesions in the aqueduct or basal cisterns, or over the cortex.²

Since this early report there has been an increasing awareness of occult hydrocephalus as a possible cause of syndromes ranging from mild dementia to akinetic mutism.³⁻⁵ In 1964 Hakim⁶ described instances of dementia due to hydrocephalus in which cerebrospinal fluid pressure was normal. A year later Adams and his associates⁷ reported three more cases, with additional clinical findings. In addition to dementia, these patients had dystaxia of gait and urinary incontinence. No cause for the hydrocephalus could be found in two of their patients; the third had a cyst of the third ventricle.

This report increased awareness that not all cases of this syndrome are the result of subarachnoid hemorrhage. Since that time it has become apparent that normal-pressure hydrocephalus can result from a number of processes—among them, subarachnoid adhesions secondary to hemorrhages caused by head injuries and intracranial operations;⁸ chronic meningoencephalitis;⁹ cerebellar hemangioblastoma;⁵ and a group of cases in which no cause can be demonstrated. Almost all of the cases in this last group are believed to be the result of low-grade arachnoiditis which results in a partial or total block at the incisura, the basal cisterns, or the cortical subarachnoid spaces. Recent reports^{10, 11} have

described a communicating hydrocephalus thought to be secondary to an elongated basilar artery, whose pulsations affected the ventricular system.

Because patients in all these groups often improve dramatically following ventricular shunting procedures, it has been thought that such procedures would produce similar results in patients with diffuse cortical atrophy. Some authors have reported encouraging results in such patients; others have seen little or no improvement. The common denominator found among patients who respond to shunting procedures seems to be an enlarged ventricular system with little or no evidence of cortical atrophy. For this reason, we have done a retrospective study to ascertain whether precise diagnostic guidelines can be established for the selection of patients who can be expected to respond favorably and for determining which procedures are most beneficial in evaluation of patients for shunting procedures.

METHODS AND MATERIALS

Charts of all patients with a diagnosis of dementia who were evaluated on various services at the North Carolina Baptist Hospital between July, 1966, and June, 1970, were examined. From this number we selected the charts of those who had undergone pneumoencephalography—a total of 62 patients. To avoid overlooking cases with the primary diagnosis of low-pressure hydrocephalus, charts indexed under the diagnosis of "hydrocephalus" were also reviewed to determine if dementia was the presenting symptom.

The primary clinical findings listed on each chart were analyzed, special attention being given to the symptoms of dementia, gait disturbance, and sphincter difficulty. Correlations were made between the clinical findings and the results of cisternography with

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radioiodinated human serum albumin (RISA), echoencephalography, brain scan, electroencephalography, and angiography. All patients whom on the basis of the pneumoencephalographic findings we considered to be possible candidates for ventricular shunt were listed; their charts were then reviewed to determine whether a shunt had been performed, and if so, whether improvement had followed.

The following guidelines (Fig. 1) were used to determine whether a patient had ventricular enlargement sufficient to justify shunting:

1. The ventricular span (VS) on the brow-up view must be 50 mm or more.

2. The frontal-horn height (FH), measured from the most posterior portion of foramen of Monro to the roof of the frontal horn along a line to the bregma, must be at least 30 mm.

3. The width of the third ventricle on the brow-up view must be 10 mm or more. Unless *all* these criteria were met, we did not classify a patient as suitable for a shunt procedure.

RESULTS

Of the 62 patients who underwent air study, 15 were found to fulfill the criteria for hydrocephalic dementia and therefore to be possible candidates for ventricular shunt. Table 1 summarizes the pertinent findings in this group of patients. Using the amount of cortical air apparent on the pneumoencephalogram as a criterion, this group can be divided into three subgroups:

1. Those with little or no cortical air (cases 5, 6, 7, 8, 9, and 14).

2. Those with moderate amounts of air in the frontal and/or sylvian region (cases 1-4, 10, 13, and 15).

3. Those with enough increase in cortical air to be consistent with diffuse cortical atrophy (cases 11 and 12).

Of the 15 patients whom we considered suitable candidates for a ventricular shunt, 7 underwent this operation. It was followed by marked improvement in one case, moderate improvement in two, and minimal improvement in three. One patient died two days after the operation, presumably of pulmonary embolism. It could not be determined why the eight remaining patients did not have a shunt, although it is probable that some of them were considered to have hydrocephalus *ex vacuo* because some cortical air was present; in all but two of these, however, the air was limited to the frontal and insular regions.

Two of the eight patients in whom shunting was not done appeared in retrospect to be particularly suitable candidates. Both of them displayed the clinical triad of dementia, gait disturbance, and incontinence, and both had extremely large ventricular systems, the VS being more than 70 mm in each case. In one of these cases the pneumoencephalographic picture (Fig. 2) was that of hydrocephalus secondary to subarachnoid block. The other patient had moderate cortical atrophy in the frontal and sylvian regions (Fig. 3).

Table 1
Summary of Cases

PATIENT NUMBER	AGE/SEX	CLINICAL	ECHOGRAM	RISA	ANGIOGRAM	PNEUMOENCEPHALOGRAM					SHUNTED	RESPONSE
						CORPUS CALLOSAL ANGLE	FRONTAL HEIGHT	VENTRICULAR SPAN	THIRD VENTRICULAR WIDTH	CORTICAL AIR		
1	61/M	Dementia, Urinary Incontinence, Left Spastic Gait	-*	-	Hydrocephalus	120	36	73	12	Moderate Frontal and Sylvian	No	-
2	70/M	Dementia Several Months, Bowel and Bladder Incontinence, Could Not Walk	-	Unsatisfactory	Hydrocephalus	125	44	57	16	Moderate Frontal and Sylvian	Yes	Moderate Improvement
3	75/M	Dementia Several Years, Ataxia-Incontinence, Questionable Liver Disease	Normal	-	Hydrocephalus	103	30	51	15	Moderate Frontal and Sylvian	No	-
4	76/M	Decreased Memory for 7 Years, No Incontinence, Gait Normal	-	Abnormal	Hydrocephalus	111	31	52	11	Moderate Frontal and Sylvian	Yes	Minimal Improvement
5	63/M	Dementia for 6 Years, Bowel Incontinence, Abnormal Gait	-	Abnormal	-	110-120	50	74	20	None	Yes	Minimal Improvement
6	17/F	Personality Change for 3 Years, Seizures, Decrease I.Q. from 140 to 110, No Incontinence, Gait Normal	Hydrocephalus	Abnormal	-	113	57	75	18	Minimal Frontal Inter-Hemispheric	Yes	Marked Improvement
7	67/M	Confusion for 1 Year, Ataxia, Hypertensive	-	-	-	110	38	72	19	Minimal Inter-Hemispheric (Ventriculogram)	Yes	Died 2 Days after Shunt of Pulmonary Embolism
8	61/M	Head Trauma - 9 Years Previous, Decreased Memory 2-3 Years, Seizures, Bowel and Bladder Incontinence, Could Not Walk	Hydrocephalus	Unsatisfactory	-	80	50	78	13	Minimal Frontal	No	-
9	50/F	Dementia for 4 Years, Gait Difficulty for 2 Years, Bladder Incontinence	Normal	Abnormal	No Venous Phase	97	40	56	17	Minimal Frontal and Sylvian	Yes	Minimal Improvement
10	68/F	Parkinson's Disease for 15 Years, with Progressive Dementia, No Incontinence	Unsatisfactory	Abnormal	-	120-130	31	50	10	Moderate Frontal and Sylvian	No	-
11	73/M	Dementia for 3 Years, No Incontinence, Gait Normal	-	-	-	118	31	61	16	Marked Increase in Sulcal Air, Mostly Frontal and Temporal	No	-
12	50/M	Dementia, Ataxic Gait, No Incontinence	Normal	-	-	135	32	58	15	Moderate to Marked, Mostly Frontal, Right More than Left	No	-
13	59/M	Decrease in Mentation for 5 Years, Ataxia, No Incontinence	-	-	-	130	30	50	12	Moderate Frontal and Sylvian	No	-
14	67/M	Dementia, Gait Difficulty for 1 Year, Rigidity of Upper Extremities with Myoclonic Jerks	Hydrocephalus	Abnormal	-	120	30	50	10	Minimal Frontal and Sylvian	No	-
15	73/M	Decreased Mentation, Ataxia, No Incontinence	-	Abnormal	-	120	32	51	10	Moderate Frontal and Sylvian	Yes	Moderate Improvement

*Study Not Done

There were three other patients who might have been candidates for shunting but who failed to satisfy the criteria for moderate to marked hydrocephalus by a few millimeters in one of the three measurements.

Morbidity after pneumoencephalography

The danger of complications from pneumoencephalography is particularly high in patients with cortical atrophy. Of the 62 patients included in this study, 6 had a moderate to severe reaction; in 42, morbidity was minimal or absent. The most common reactions were fever, lethargy, increased confusion, and hallucinations. Morbidity was considered to be moderate to severe if these phenomena persisted longer than two days. In two instances, permanent worsening of the patient's condition was attributable to the air study. One of these was a patient with striking cortical atrophy and a nearly normal ventricular system. He had been able to walk and to feed himself, but after pneumoencephalography he became bedfast and akinetic.

Results of other studies

In the 15 cases which we considered suitable for ventricular shunting, an attempt was made to correlate the pneumoencephalographic findings with the results of other studies, in an effort to determine which screening procedures were most likely to detect hydrocephalic dementia without subjecting the patient to the hazards of pneumoencephalography.

Seven of these patients had had echoencephalograms which suggested ventricular dilation in three cases. Nine had had RISA studies; of these, six were abnormal and three were technically unsatisfactory. The RISA study was considered abnormal if the isotope remained within the ventricular system or if there was a delay in its distribution over the hemispheres. In one patient with the clinical diagnosis of Creutzfeldt-Jakob's disease, the RISA study was abnormal and the pneumoencephalogram revealed enlarged ventricles. Angiograms were performed in five patients. In four, measurement of the thalamostriate vein indicated hydrocephalus; in the fifth, the venous phase was not well shown.

Abnormalities of a toxic or metabolic nature were found only in the case diagnosed as Creutzfeldt-Jakob's disease (thought to be due to a slow virus infection¹²) and in a patient who had evidence of liver disease (probably secondary to alcoholism). In the remaining cases, the dementia was considered idiopathic.

COMMENT

The value of performing ventriculocisternal or atrial shunting procedures in patients with large ventricles who have moderate to marked amounts of cortical air has not been unequivocally established. Appenzeller and Salmon¹³ operated on five patients with enlarged ventricular systems and cortical atrophy, one of whom presented the clinical picture of Huntington's chorea.



Fig. 1. Pneumoencephalogram indicating where the various measurements were made. A = ventricular span, B = third ventricular width, C = frontal horn height.

They reported marked improvement in three patients thought to have Alzheimer's disease, and mild improvement in one patient thought to have Creutzfeldt-Jakob's disease. The patient with chorea did not improve. It should be noted that the patients who improved had either incontinence or dystaxia in association with their dementia. The improvement was not associated with any significant change in ventricular size, as determined by follow-up air studies. This finding was taken as evidence that brain wasting had occurred, and the authors postulated that lowering the CSF pressure had increased the blood supply to the remaining neurons. They concluded that such shunting would probably be of little or no value in cases where the ventricular system was nearly normal in size. Salmon and Armitage¹⁴ found that eight of ten such patients improved after a shunting procedure—four of them showing marked or moderate improvement.

Other workers have had less gratifying results with shunt procedures in hydrocephalic patients who have moderate to marked amounts of air over the cortex. Ojemann and his co-workers¹⁵ reported no improvement in five cases of presumed Alzheimer's disease. All five had "abundant filling" of enlarged cerebral subarachnoid spaces and enlarged ventricles, although ventricular measurements were not given. These same authors, however, did report a fair to good response to shunting in a group of patients who had only partial obstruction of the CSF flow. In these patients the pneumoencephalogram showed air in the sylvian and/or frontal subarachnoid spaces but none over the parietal

convexities. Similar pneumoencephalographic findings were present in all but two of the patients in our series who were retrospectively selected as shunt candidates but who did not have shunt operations. It is our belief that they might have benefited from such a procedure.

In this series less than half the patients who seem retrospectively to qualify for ventricular shunting were given the benefit of this procedure. The reasons are not completely clear; but it seems that in some cases the presence of significant amounts of cortical air was considered a contraindication to any surgical procedure.

In one hypertensive patient pneumoencephalograms showed invagination of the anterior third ventricle by what might possibly have been an elongated basilar artery. Unfortunately, angiograms were not made, nor was an autopsy permitted when the patient died two days after the shunting operation. In the cases reported by Greitz and his associates,¹¹ all patients with hydrocephalus secondary to an ectatic basilar artery also had high blood pressure. Their pneumoencephalographic picture was indistinguishable from that of patients with hydrocephalus secondary to subarachnoid block, except that in each case an indentation could be seen in the floor of the third ventricle.

The mechanism responsible for the improvement that often occurs after shunting is still speculative. Greitz¹⁶ believes that decreased cerebral blood flow is the pathologic mechanism in hydrocephalic dementia. He has reported seven cases of normal-pressure hydrocephalus

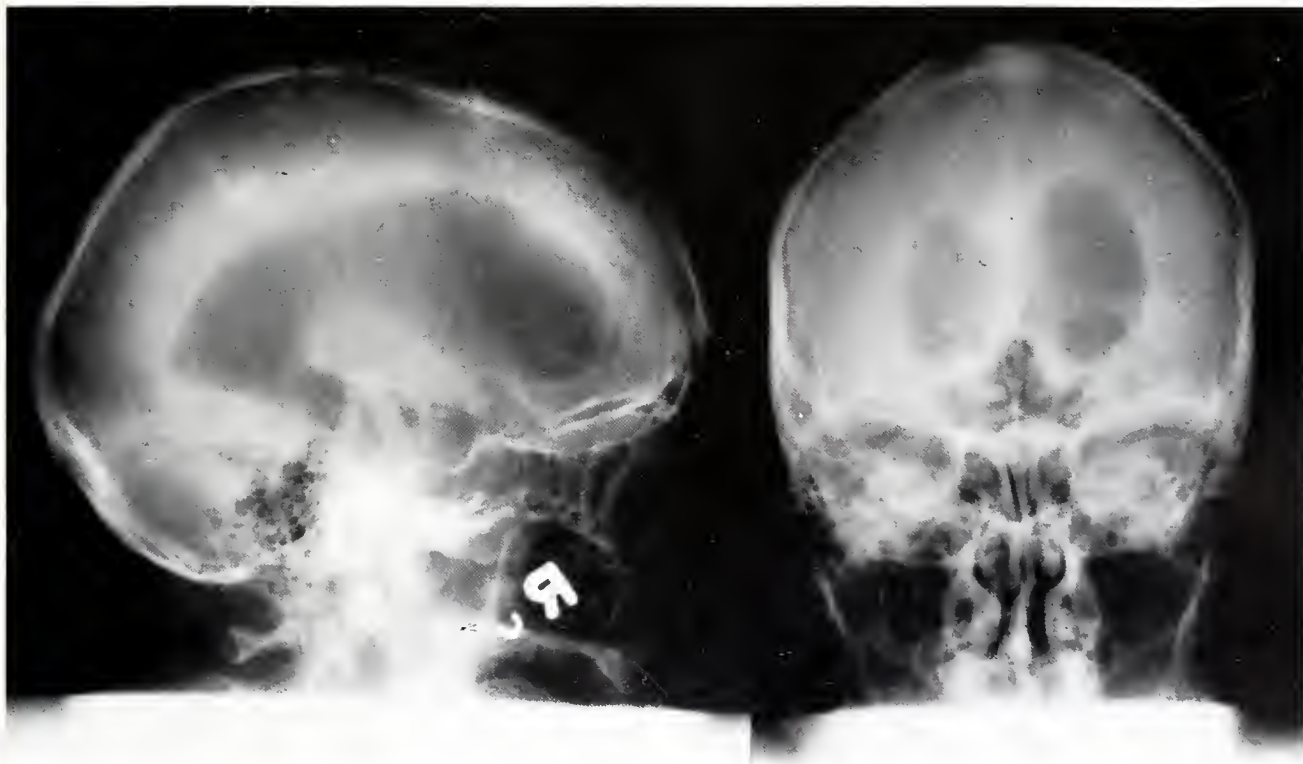


Fig. 2. Pneumoencephalogram of Patient 8 who had the clinical triad of dementia, incontinence, and gait difficulty.

due to various causes, including trauma, subarachnoid hemorrhage, elongated basilar artery, and previous surgery for a subdural hematoma. Using the ^{133}Xe clearance method, he determined that the cerebral blood flow in all seven patients was lower than normal. After shunt, blood flow was found to be increased, the most striking increases occurring in the three patients who had the greatest clinical improvement.

Salmon¹⁷ has reported increased cortical blood flow, associated with clinical improvement, after shunting operations were done on patients with hydrocephalus and persistent disability following head injury. RISA studies were not reported on this group, nor did Salmon mention the presence or absence of cortical air on the pneumoencephalograms. He has since reported a larger series of patients who had normal RISA studies prior to surgery;¹⁸ four of these patients demonstrated significant improvement after shunting.

From the literature and from the findings of the present study, it seems clear that the perfect screening test to determine hydrocephalic dementia has yet to be devised. Benson and his associates¹⁹ believe that a combination of RISA study and pneumoencephalography is sufficient to identify patients with normal-pressure hydrocephalus. Katzman and Hussey²⁰ have recently introduced an intrathecal infusion test which may help to identify those patients who will respond best to shunting.

On the basis of our experience we propose the following sequence of special studies to determine which demented patients might be candidates for a shunt. First, a brain scan and echoencephalogram are done to

locate the midline and determine ventricular size.²¹ If these do not suggest an intracranial mass lesion, a lumbar puncture is done to determine the pressure and the cellular and protein content of the cerebrospinal fluid, and to inject radioiodinated serum albumin. While the RISA study is in progress, tests for toxic and metabolic causes of dementia are carried out and other screening tests (for example, electroencephalograms and psychometric evaluations) are performed. A right brachial angiogram is done to look for evidence of hydrocephalus, subdural hematoma, or elongation of the basilar artery.

If the RISA study is abnormal or if angiography shows evidence of significant hydrocephalus, neurosurgical consultation is obtained for the purpose of considering air studies and a possible shunt. If both the RISA study and the angiogram are normal, the patient is not subjected to pneumoencephalography. An intermediate RISA pattern or a delay in absorption for as long as 96 hours, with or without ventricular reflux,²² is considered sufficient evidence of altered CSF dynamics to justify air study.

SUMMARY

This has been the report of a retrospective study of all demented patients who underwent air studies in our institution during a recent four-year period. Of the 62 whose pneumoencephalograms were reviewed, 15 satisfied the criteria for significant hydrocephalus and were considered (in retrospect) to be shunt candidates. In only seven of these patients were shunts performed,



Fig. 3. Pneumoencephalogram of Patient 1 showing striking ventricular enlargement in association with a moderate amount of frontal and sylvian cortical air.

although recent information indicates that the other eight might have benefited from such a procedure.

The RISA study and angiography proved to be helpful in revealing normal-pressure hydrocephalus, and the echoencephalogram shows promise. A testing sequence for determining shunt candidacy is presented.

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This [menstrual discharge] in the beginning is seldom so instantaneous as to surprise females unawares. It is generally preceded by symptoms which foretell its approach: as a sense of heat, weight, and dull pain in the loins; distention and hardness of the breasts; headache; loss of appetite, lassitude; paleness of the countenance; and sometimes a slight degree of fever. When these symptoms appear about the age of which the menstrual flux usually begins, every thing should be carefully avoided which may obstruct that necessary and salutary evacuation; and all means used to promote it; as sitting frequently over the steams of warm water, drinking warm diluting liquors, etc.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 357.*

Solo Versus Partnership Practice of Dermatology in the Carolinas

Sherwood W. Barefoot, M.D.

SINCE I have had an associate in the private practice of dermatology for more than six years, after 17 years of solo practice, I have frequently been questioned by both established practitioners and residents contemplating entering private practice regarding both the merits and disadvantages of each type of practice. Since I could speak only from personal experience, it seemed to me that a survey to attempt to find some of the answers might be worthwhile.

To my knowledge, Dr. J. L. Callaway¹ is the only one who has written about the practice of dermatology in our state. His efforts were directed mainly towards the history of dermatology in North Carolina.

MATERIAL AND METHOD

Dermatologists in North and South Carolina have an informal organization called the Carolina Dermatological Society, which holds a combined social and scientific session each spring. The membership includes all physicians in these two states who practice full time dermatology and wish to attend the meetings. In addition, we consider as members two dermatologists who practice in Danville, Virginia, because of our close association with them over the years.

Nearly every member of the Carolina Dermatological

Society is well known to me. This relatively small number of dermatologists appeared to be my best hope for making a worthwhile survey of this nature, since I thought they knew me well enough to respond frankly, provided that I promised to treat their information with the utmost confidence. This promise was given and will not be violated.

Questionnaires (Fig. 1) were accordingly mailed to 65 dermatologists in private practice. Those who work full time in medical centers were omitted for obvious reasons. Of the 65 questionnaires sent out, 52 were returned—33 from solo practitioners and 19 from dermatologists with associates. These practitioners included two of our older, semiretired colleagues, who were kind enough to fill out the questionnaire although they were aware that their answers would not be pertinent to today's practice of dermatology.

Several respondents failed to answer all the questions, but I am grateful for the response and will attempt to present the information gained from the questionnaire.

Income

One solo practitioner and one practicing in a partnership did not answer the question regarding gross and net income. Consequently, we have only 48 respondents supplying information regarding finances.

The average net income for the respondents was determined and is assigned a value of 1. Any figure

¹Read before the Section on Dermatology, Medical Society of the State of North Carolina, Pinehurst, May 17, 1971.

Reprint requests to 1030 Professional Village, Greensboro, N. C. 27401.

showing a value less than 1 is below average, and, conversely, any figure greater than 1 is above the average of the 48 respondents.

The relation of income to age is shown in Table 1. Practitioners under 40 years of age earned less than the average. This group included several men who have been in practice for very brief periods. Those past the age of 55, as would be expected, had the highest earnings.

Patients seen

Both the solo practitioners and those with one or more associates (only one group included as many as three associates at the time of the survey) averaged eight new patients per day. According to the respondents, the solo practitioners see an average of 26 return patients per day, while those in partnership see an average of 38 (Table 2). Any interpretation of this difference in the number of return visits between the two groups is purely speculative. One obvious guess is that the group practitioners may employ more auxiliary personnel, thereby making it possible for more patients to return, with very little involvement of the physician's time.

Table 3 shows that the partnership practices do better by about 25 per cent in average net income. Their average net income is 1.16, with an overhead of 37 per cent, while the net income of the solo practitioner is 0.90 with an overhead of 41 per cent. The greater net income for partnership practices is probably due to larger number of return patients seen.

Preference as to type of practice

Each of the 50 respondents answered the question regarding preference as to type of practice (Table 4). Of 31 solo practitioners, 9 would prefer a partnership or a group if beginning practice today. Three physicians who have associates intimated that they had formerly been happier in a solo practice than they were in a partnership; they had resorted to the partnership in an effort to reduce some of the demands of solo practice. Two stated that they were quite satisfied with their younger associates from a professional standpoint, but felt that they showed insufficient interest in the many details of operating an office.

Table 1
Income Among Age Groups
(on basis that income for
average dermatologist is 1.0)

Age Group	No. of Dermatologists	Relative Net Income
Under 40	12	0.83
40 - 55 Years	20	1.02
Over 55 Years	16	1.16

Table 2
Comparison of Numbers of
Patients Seen Per Day

	New Patients	Return Patients
Partnership (each physician)	8	38
Solo	8	26

Table 3
Comparison of Net Income
and Overhead Expenses

	Average Net Income	Average Overhead Expenses
All dermatologists	1.0	38.5%
Partnerships	1.16	37%
Solo	0.90	41%

Table 4
Preference as to Type of Practice
Among Dermatologists

	Solo	Partnership	Group (3 or more)	Undecided
Solo practitioners	18	8	1	4
Partnership or group of practitioners	3	11	2	3

Several younger dermatologists in solo practice suggested salaries of \$18,000 to \$20,000 for the first year, with equal sharing after another three years.

Among those in partnership practice, there was almost complete agreement that the junior should be salaried for the first year (recommendations vary from \$12,000 to \$24,000). After the first year, graduated increases in the junior associate's share with full partnership after five years was the recommendation of the majority. Three suggested a salary of \$12,000 for the first year, with a small incentive percentage for that year.

Average income in relation to size of community

There is no statistical correlation between income and the size of the city in which a practice is located. The slightly lower net income in cities of 100,000 or more may be due to the larger number of younger men in these cities as opposed to a larger number of older men, with relatively higher incomes, in cities of 50,000 to 100,000 (Table 5).

Evaluation of partnership practice by senior associate

Six dermatologists responded to the questions regarding the effectiveness of the partnership (Table 6). The answers suggest that these men are generally satisfied with an associate arrangement. All six have previously practiced solo.

Table 5
Average Income in Relation
to Size of Community

Size of Community	No. of Dermatologists	Relative Income
Under 50,000	15	1.05
50,000 - 100,000	15	1.12
Over 100,000	18	0.97

Table 6
Evaluation of Partnership by
Senior Associates

	Yes	No
Practice less demanding with associates?	4	2
Employees as efficient with more than one "boss"?	4	2
More free time with an associate?	5	1

Table 7
Hours Worked Weekly and Days
Attending Medical Meetings Yearly

	Hours Worked Per Week	Days at Medical Meetings Yearly
Solo	44	13
Partnership	37	14

Table 7 suggests that respondents in partnership work somewhat fewer hours than those in solo practice, while members of both groups spend about two weeks each year attending medical meetings. The average number of hours worked by dermatologists with associates is influenced to some degree because, in at least two instances, the senior associate had purposely reduced his working hours significantly.

COMMENT

Answers to some of the questions included in the questionnaire could not be evaluated. The answers to question 5 regarding the number of years in practice before a working schedule was full were totally confusing. The same held true for question 9 relative to changing from partnership or group practice to solo. Only two respondents were in this category.

The reasons given for preferring group or partnership practice (question 8) were too varied to be documented. In the main, the 21 who preferred solo prac-

tice liked the independence and satisfaction of doing things on their own. Most of the nine solo practitioners who would prefer a partnership or group practice stated that the opportunity to enter this type of practice had not been present at an opportune time.

Lower overhead expense, ease of consultation, companionship, and more free time were the most frequently mentioned advantages of partnership practice. The most frequent disadvantages mentioned were personality conflicts and involvement in the personal problems of associates. Strangely enough, not a single respondent mentioned professional jealousy as a problem.

SUMMARY

A survey of 50 dermatologists (31 in solo practice and 19 with associates) is reported. While it is realized that the number of dermatologists polled is too small to justify definite conclusions, it would appear that a partnership or group practice is more remunerative and efficient in the Carolinas than is solo practice. The physician should evaluate his personality and goals before deciding which type of practice is better suited for him. A factor not brought out in the paper is that some partnerships do not last because of personality conflicts and other personal considerations.

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1. Age:
2. Years in practice:
3. Type of practice (solo, partnership, or group of 3 or more):
4. Average number of patients seen per day:
A. New: B. Returns:
5. Number of years in practice before your working schedule was full:
6. If solo, please give average income for past two years (If in practice for not more than two years, please give amounts for each year.)
Gross: Net:
7. If in partnership, please give following information for past two years:
Gross of Partnership Net of Senior Partner Net of Junior Partner
1st year:
2nd year:
8. If you were entering private practice at the present time, which of the three categories listed in 3 above would you prefer? State reasons pro and con.
9. Did you ever practice in a partnership or group and change to solo? If so, why?
10. If you have an associate, please specify whether you think the new man should be on a salary or a percentile for the first year. In either case, how much? How long should it take before he shares equally in the net income?
11. What is the population of the city in which you practice?
12. If you are the senior member of a partnership, please answer the following:
A. Have you found your practice less burdensome with an associate?
B. Have your employees been as efficient with two "bosses" as previously?
C. Do you have more free time?
13. How many hours do you work at your practice per week?
14. How many days per year do you spend attending medical meetings?

Fig. 1. Questionnaire for Members of Carolina Dermatological Society

A Survey of Hospital-Sponsored Long-Term Care Units Aided by Hill-Burton Funds

Helen N. Flythe, R.N.*

IN June, 1971, the North Carolina Medical Care Commission received two requests from hospitals for permission to convert their long-term care units to acute beds. In the two-year period prior to June, 1971, three hospital-sponsored facilities designed to render long-term care and financed with Hill-Burton funds had already ceased to function as such. At the same time, four hospital-sponsored long-term care units were in planning stages or were under construction in North Carolina. In light of these circumstances, the Medical Care Commission was prompted to initiate a study of the operational difficulties in Hill-Burton LTC facilities.

PROCEDURES

Questionnaires were sent to the 12 hospital-sponsored facilities in the state which had been aided by Hill-Burton funds and were functioning as long-term care units in June, 1971, or had functioned as such. Statistical data on operating costs, types of patients and medical disorders being treated, and the staffing of units were requested. Responses were received from eight of the nine facilities still in operation, although cost figures were received from only seven of this group. All three of the facilities that had ceased to operate submitted data; however, two of these hospitals had not kept separate statistics for their LTC units and thus reported estimates. For these reasons, data from the three non-operating facilities were not included in averages. The statistics requested for the study were to cover the last full fiscal year of the facility's operation.

Facilities that were in operation for less than a year submitted data for the months of operation. Six of the eight operating facilities gave data for the fiscal year October 1, 1969 to September 30, 1970. Figures from the other two units still in operation were for the nine-month period ending June 30, 1971.

Some of the hospitals were distinguishing between the terms *long-term care* and *extended care* in referring to their units. Others used the terms interchangeably. It was felt that the terms should be specifically defined for this study as follows:

ECF—An extended care facility operated *primarily* to provide services to post-acute patients who require convalescent and/or rehabilitative care for a limited period following intensive hospitalization.

LTC—A long-term care facility serving *primarily* patients with chronic conditions requiring continuing care, the majority of whom are elderly.

The administrators were asked to classify their units according to these definitions. Of the nine operating units, five classified themselves as ECF's, three as LTC's, and one as a split unit with both ECF and LTC wards. As the study progressed, however, it became apparent that regardless of how a unit was classified, the types of patients treated were similar and many of the same problems confronted all the units. Also, the services offered by the units were basically the same, and there was no correlation between classification as ECF or LTC and success or failure in operating a unit. For these reasons, the surveyor treated all data from the operating units alike. In this article, the term *LTC* is used to refer to all the facilities surveyed regardless of how they were classified by the administrators.

In order to supplement information contained in the

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questionnaires, the surveyor visited all 12 of the hospitals in an effort to interview the hospital administrator, the director of nursing, and a physician at each facility. Eleven administrators, 11 directors of nursing, one long-term care supervisor, and three physicians were interviewed concerning operational problems in their units.

SURVEY FINDINGS

Statistics in Table 1 show the range in *bed capacity* and in *average length of stay* for the LTC's surveyed. The *percentage occupancy* is compared with that of the sponsoring general hospitals.

Table 1
Bed Capacity and Average Length of Stay

	Long-Term Care			General Hospital		
	Min- imum	Max- imum	Aver- age	Min- imum	Max- imum	Aver- age
Bed Capacity	23	66	47.6			
% Occupancy	60%	98.8%	79%(m)	43%	100.4%	69.6%(m)
Average Length of Stay in Days	57.1	264	143.5			

(m) Median

Patient data revealed that a large majority of patients in the units were elderly, and that death accounted for a quarter of all LTC discharges. Nearly half were Medicare patients, while approximately one fifth were Medicaid-approved.

When asked if *restorative services* were available to their patients, seven of the eight operating units indicated that physical therapy was available. Six indicated at least one additional service such as occupational therapy or recreational therapy. Only three of the units answered *yes* when asked if as many as 50 per cent of their patients required such services or responded to them.

In supplying *cost data*, all of the hospitals except one reported cost per LTC patient per day to be lower than the cost per patient per day in the associated general hospital. The facility reporting LTC cost as higher also listed the highest LTC daily cost and the

Table 2
Patient Data for LTC's Surveyed

	Min- imum	Max- imum	Aver- age
Age	18	102	75.9
% 65 years and older	69.4%	97%	90.6%(m)
% female admissions	55%	77%	67.5%(m)
% male admissions	23%	45%	32.5%(m)
% white admissions	34%	100%	98%(m)
% non-white admissions	0%	66%	2%(m)
% Medicare-approved admissions	13.4%	90%	42.8%
% Medicaid-approved admissions	6.6%	67.3%	21.3%
% discharges by death	11.5%	46.1%	25.8%

Primary diagnosis of patients in order of frequency of admissions:

1. Cardiovascular disorders
2. Carcinoma
3. Orthopedic disorders
4. Neurological disorders

Physical Status of patients in order of frequency of admissions:

1. Chronic
 2. Convalescent medical
 3. Convalescent surgical
- (m) Median

minimum general hospital cost. This unit recorded an income per patient per day of \$14.84 and a deficit of \$24.11 per patient per day. With a general hospital income of \$55.92 per patient per day, the hospital revenue offset the LTC costs. Only two of the units were reporting losses that seriously affected their operation before a \$14.00 a day ceiling on Medicaid benefits was imposed by the 1971 General Assembly. The median deficit of all operating facilities was \$.44 per patient per day. In Table 3 cost figures for the last

Table 3
Financial Operation

	Long-Term Care			General Hospital		
	Min- imum	Max- imum	Aver- age	Min- imum	Max- imum	Aver- age
Cost/patient/day	\$14.64	\$38.95	\$26.00	\$29.87	\$75.71	\$50.03
Semiprivate room rates	14.00	25.00	18.13	25.50	33.00	30.94
Income/patient/day	14.84	27.85	21.27	34.54	72.35	54.52
Deficit/patient/day	0	24.11	.44(m)	0	3.36	0(m)

(m) Median

fiscal year of operation or for the months of operation of the LTC's are compared with corresponding statistics for the associated general hospitals.

Data concerning the *staffing of units* revealed no significant difference in the total number of nursing personnel per patient—registered nurses, licensed practical nurses, aides, and orderlies—staffing these units as compared with the total number of nursing personnel per patient staffing acute-care units of similar size. Including all three shifts, the ratio of nursing personnel in full-time equivalents to patients was 1:2 for the LTC units and 1:2.1 for comparable units in the associated hospitals. However, there is a significant difference in the levels of personnel required for the two types of units. Proportionately fewer RN's but more LPN's, aides, and orderlies are required in the LTC's than in the general hospitals. Staffing the units with nursing personnel of all levels was said to be more difficult in some geographical areas than in others, but overall it was considered no more difficult than staffing the general hospital. Problems were indicated, however, in finding qualified paramedical personnel to meet the Medicare-Medicaid standards.

When asked to indicate the *most urgent problems* affecting the operation of their LTC units, a majority of the administrators listed the \$14.00 a day ceiling on Medicaid payments. Seven of the nine administrators stated that it would be impossible to maintain a long-term care unit on \$14.00 per patient per day. At the time of the survey, some of the hospitals sponsoring LTC's were discharging their long-term Medicaid patients or were transferring them to acute units. The surveyor received the impression that many of these hospitals are considering closing some LTC beds or converting some or all of them to acute beds.

Spokesmen for the units indicated that even before the \$14.00 a day ceiling was established, *the following problems existed in connection with Medicaid and also with Medicare:*

1. There is confusion within the community, among

the doctors, and among the hospitals over the levels of care covered by Medicare-Medicaid. Patients are admitted to units assuming that their bills will be covered by extended-care benefits and then are not approved.

2. Long-term patients are usually older, and older patients often have multiple problems. One patient might require rehabilitation (approved for ECF benefits), but also have additional medical problems chronic in nature. The patients are often disallowed Medicare-Medicaid benefits before their need for skilled nursing care is ended.

3. Utilization committees are required by Medicare-Medicaid to evaluate periodically the level of care required by individual patients, and then are not entrusted with the decision as to whether this level of care should be continued.

4. There is not an adequate number of nursing homes that will take patients requiring skilled nursing care. Now, without financial aid, patients have no place to go, and bottlenecks develop in the units. As more of the patients reach this status, fewer are able to take advantage of the restorative services available, and there is additional financial loss to the units.

The administrative officials indicated needs for: (1) specific definitions of terms acknowledged by all health-related agencies, both state and federal; (2) more definite guidelines for the levels of care covered by Medicare and Medicaid benefits; and (3) financial aid for those persons who do not qualify for the ECF benefits under the strict Medicare-Medicaid criteria but still require skilled nursing.

Every administrator interviewed stated that there was a definite need in his community for a facility providing the level of care furnished by his LTC unit.

CONCLUSION

The two units that had requested to convert their long-term care beds to acute beds in June, 1971 did so in September, 1971. In the same month a third LTC closed a part of its beds. All three units gave as the reason for closing the financial difficulties caused by

the \$14.00 a day ceiling on Medicaid. Among those still operating the units, the consensus is that while there are problems in operating LTC's, the problems are not insurmountable. These hospitals hope to continue to provide long-term care unless the financial situation worsens.

During its recent special session, the General Assembly raised the \$14.00 per patient per day maximum for Medicaid extended care benefits to \$18.50. Certainly this action should benefit hospital-sponsored LTC's, but it is noteworthy that only two of the six units still operating reported an operating cost during fiscal 1969-1970 that would be covered by the new amount.

Even if the cost factor were eliminated, evidence in this study indicates that a hospital would still face serious operational problems in maintaining an LTC. These are summarized in the following conclusions about long-term care drawn from this survey:

1. The terms *ECF* and *LTC* are misleading. Many of the units started with the idea they would be short-term rehabilitative units, but they later found that they were treating long-term patients.

2. As hospitals and medical staffs are acute-care oriented, they have experienced some difficulties in adjusting their services to the long-term specialty units.

3. The demands upon a hospital to provide a highly refined and sophisticated service and the need of a hospital to prorate its costs for these units cause the operating cost of an LTC to exceed what the general public expects.

4. The federal red tape in transferring patients from acute hospitals to long-term care facilities is a definite impediment and hence is a discouragement.

5. There is a definite lack of communication and understanding concerning the levels of care covered for extended-care benefits by Medicare and Medicaid.

6. The overwhelming need is for long-term care. Except perhaps in larger hospitals with a full range of specialists drawing patients from long distances, the statistics demonstrate no substantial need for specialized units for post-acute rehabilitative care.

The symptoms of a confirmed lues are, buboes in the groin, pains of the head and joints, which are peculiarly troublesome in the night, or when the patient is warm in bed; scabs and scurfs in various parts of the body, especially on the head, of a yellowish colour, resembling a honey-comb; corroding ulcers in various parts of the body, which generally begin about the throat, from whence they creep gradually, by the palate, towards the cartilage of the nose, which they destroy; excrescences or exostoses arise in the middle of the bones, and their spongy ends become brittle, and break upon the least accident; at other times they are soft, and bend like wax; the conglobate glands become hard and callous, and form, in the neck, armpits, groin, and mesentery, hard moveable tumours, like the king's evil; tumours of different kinds are likewise formed in the lymphatic vessels, tendons, ligaments, and nerves, as the gummata, ganglia, nodes, tophi, etc.; the eyes are affected with itching, pain, redness, and sometimes with total blindness, and the ears with a singing noise, pain and deafness, whilst their internal substance is exulcerated and rendered carious; at length all the animal, vital, and natural functions are depraved; the face becomes pale and livid; the body emaciated and unfit for motion, and the patient falls into an atrophy or wasting consumption.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 348.

Editorials

PHYSICIANS ON SKIS

Skiing is becoming increasingly popular during the winter months in Western North Carolina. The crowds are enlarging yearly at such areas as Sugar Mountain, Beech Mountain, Seven Devils, and Appalachia. Some of these slopes may have as many as 2,500 skiers on them on a weekend day.

Many physicians, like the general public, have launched themselves on skis in an effort to take part in this exciting pastime. It doesn't require very much time on skis, however, to appreciate that the sport has its hazards and therefore must be managed carefully. It is not uncommon to witness falls that result in injuries. The occurrence of these injuries poses a dilemma for some physicians, because they may be unsure of their first aid and unaware of the skills of the members of the Ski Patrol.

The National Ski Patrol System is a nationwide organization made up of volunteer men and women. The purpose of this organization is to promote safety and provide first aid and transportation to injured skiers. The patrolmen range in age from 18 to 50. Their training includes ten hours work in the American Red Cross standard first aid course, 16 hours in the advanced first aid course, and eight hours of refresher first aid work each year before the beginning of the skiing season. In addition, some of the patrolmen have taken the emergency medical technician course sponsored by the American Academy of Orthopaedic Surgery, and also special training in emergency cardiopulmonary resuscitation sponsored by the American Heart Association.

The patrolmen spend additional time on the slopes learning and practicing techniques for handling various kinds of trauma and medical emergencies. These include measures for dealing with the coma patient and the patient with seizures, as well as lacerations, extremity, and spine injuries. Much time is spent in learning how to transport the injured or ill skier.

If the skiing physician comes upon an accident victim, he should deliver what first aid he can until the Ski Patrol arrives and then assist them in any way possible. In most cases, little help will be needed by the patrolmen. In these cases, the best course may be to proceed to the lodge ahead of the injured skier and then offer medical assistance at that point. Most of the

patrols include volunteer physicians, and these men are able to render necessary care required beyond first aid.

It should be comforting to physicians and laymen to know that the Ski Patrol is present at the slope and well trained to handle first aid and emergency transportation.

E. T. PRESTON, M.D.

THE FRONT OFFICE

*Good morning: How are you?
A smile coming thru,
Excuse me—the phone.
Doctor will see you soon.*

Simple words, simply stated, often heard in any doctor's office. The manner in which the medical assistant in the front office approaches and receives the patient is of key importance to establishing and maintaining the proper doctor-patient relationship.

In 1963, with the endorsement of the Medical Society, a chapter of the American Association of Medical Assistants was organized. Following the first annual meeting of the North Carolina Association of Medical Assistants in 1964, the then Governor Terry Sanford declared November 8-14, 1964, Medical Assistants Week. With membership limited to administrative and technical assistants of members of the State Medical Society, the organization has continued to function and grow.

At the seventh annual meeting in Durham, October 22-24, 1971, Miss Joan Michaels was installed as the new president. Looking to the year ahead, she conceived the activities of the association as analogous to a train journey. As the passengers aboard, she personalized the virtues and characteristics of the ideal medical assistant. Among them were to be experience, patience, loyalty, honesty, kindness, determination, perseverance, respect, dignity, wisdom, and hard work.

No one could be expected to exhibit all these attributes, but the qualified medical assistant who greets a variety of personalities as they enter the doctor's office should possess many of them in some degree.

The Association of Medical Assistants strives to create and maintain standards of excellence in this group of key agents in the delivery of health care and merits the concern and active support of North Carolina doctors.

J.S.R.

Committees and Organizations

STATEMENT CONCERNING PROPOSED PROGRAM OF HOSPITAL, MEDICAL AND DISABILITY BENEFITS FOR TEACHERS AND STATE EMPLOYEES

I am Charles W. Styron, M.D., President of the Medical Society of the State of North Carolina and also chairman of the Governor's Committee on Community Medical Care.

As President of the State Medical Society, I represent almost 4,000 members of the Society, a majority of the practicing doctors of medicine in North Carolina.

We commend the General Assembly and the State for the foresight and interest in teachers and state employees as evidenced by the passage of the General Statute providing for a program of hospital and medical care benefits.

We regret that we or some group of practicing medical doctors did not have an opportunity to review the proposed program of Hospital, Medical and Disability Benefits for North Carolina teachers and state employees prior to the specifications being distributed to the insurance carriers.

We feel that the physicians of the state do have a vital interest in their patients, the citizens of North Carolina, and in the teachers and state employees. One of the very purposes of the Society is to enlighten and inform people with regard to the great problems of medical care and public health. . . .

Professional payments should be restricted to those health providers who are graduates of a school accredited by the National Commission on Accreditation and the Office of Education of the Department of HEW.

Experience has shown that an acceptable plan should certainly make adequate provision for:

1. Basic coverage — to protect against usual medical care costs whether incurred on an ambulatory or institutional basis.

2. Corridor—to cover most costs above the basic (as in major medical insurance).

And if at all possible (financially feasible) a plan should also include

3. Catastrophic—to cover medical care costs above the corridor (that is above the provisions of major medical).

Presented by President Charles W. Styron before the Board of Trustees, Teachers and State Employees System of North Carolina.

The proposed program of hospital, medical, and disability benefits was authorized for teachers and state employees by the last General Assembly.

The basic coverage mentioned here should include such things as:

- Inpatient hospital and surgical benefits
- Outpatient hospital benefits
- Laboratory and x-ray
- In hospital professional visits
- Maternity benefits
- Coverage of dependent children at birth
- Consultation services
- Anesthesiology by a physician

Reimbursement should be on the basis of usual, customary, and reasonable charges.

The plan should have encompassed in it an adequate claims review mechanism.

The medical profession of North Carolina is unalterably opposed to the inclusion of chiropractic in the hospital and medical insurance programs for the thousands of state employees. Such inclusion would seriously reduce the quality of health care provided and increase the cost without any justification. Evidence is overwhelmingly conclusive and documented by independent studies, that chiropractic is an unscientific cult whose practitioners lack the necessary training and background to diagnose and treat human disease.

Nationally, the cost of inclusion of chiropractors under Medicare on the same basis as doctors of medicine or doctors of osteopathy was estimated in 1969 by the Social Security Administration at 26 cents a month per enrollee, or \$60 million. If this cost figure were applied to the proposed 130,000 state employees to be covered, this would amount to a cost of over \$400,000 (actually \$405,600). It might be well to note here that from January to December 1970 the total North Carolina Medicaid expenditure for chiropractic services amounted to \$114,361.06.

Three government reports, including one ordered by the Congress, have found that chiropractic is not qualified as a health care provider. They are:

- HEW Study Report to Congress, entitled Independent Practitioners under Medicare (December 1968)
- Task Force on Medicaid and Related Programs (June 1970)

- National Advisory Commission on Health Manpower (November 1967)

In addition, the federal government's own Health Insurance Benefits Advisory Council (HIBAC) has advised Congress of its strong opposition to chiroprac-

tic inclusion under the national Medicare program.

This position is also supported publicly by: The American Public Health Association, The American Hospital Association, The Association of American Medical Colleges and most health-oriented national organizations. It also is supported independently by the AFL-CIO, the National Council of Senior Citizens, and the Consumer Federation of America.

The distributed [to conferees] leaflet entitled "What They Say About Chiropractic" includes excerpts of these and other public statements in opposition to chiropractic.

The Task Force on Medicaid and Related Programs specifically recommends also that "a legislative amendment should be enacted (by the Congress) denying Federal financial participation in Medicaid payments to chiropractors and naturopaths." This position also is supported strongly by the American Public Health Association, the American Medical Association, the Consumer Federation of America, and others.

Further, I would like to relate to you other documented points: No chiropractic schools are accredited by any recognized educational accrediting agency in the United States. You no doubt know that the National Commission on Accreditation and the Office of Education, Department of Health, Education and Wel-

fare are the two agencies that recognize and approve other accrediting agencies.

Chiropractic schools and students are not included in HEW programs such as Health Professions Educational Improvements Grants, Health Professions Students Scholarships, and Health Professions Student Loans.

Chiropractors are not granted commissions in the Armed Forces and are not eligible to practice in VA hospitals, nor are they allowed to practice in any hospital accredited by the Joint Commission on Accreditation of Hospitals.

Very relative to the task you are now considering is a situation experienced by the National Association of Letter Carriers. In 1960 the brothers of the Association undertook to provide a plan of health insurance. At that time, actuaries advised that chiropractors not be included in the program. After five years of unsatisfactory service and no small expense to the program, chiropractors were deleted from the program on January 1, 1966.

It should be pointed out that physicians do not view chiropractors as an economic threat to medicine, but are concerned for the patient about the possibilities of delayed diagnosis and treatment which often can very well complicate a disease.

Bulletin Board

NEW MEMBERS of the State Society

Bobby Watson Brawley, MD, NS, 1022 Doctor's Bldg., Charlotte 28207

Wm. Rowell Burleson, MD, U, Rt. 1, Box 801, Castle Rd., Lumberton 28353

James Ronald Edwards, MD, Path, 6393 New Market Way, Raleigh 27609

Ralph Herbert Eisaman, MD, P, 713 College St., Oxford 27565
Hugh Lanier Farrior, MD, ObG, 421 W. Marion St., Shelby 28150

John Eppes Flournoy, MD, R, 917 Rosanne Dr., Kinston 28501
Timothy Kenney Gray, MD, I, UNC Dept. of Medicine, Chapel Hill 27514

William Grossman, MD, I, UNC Dept. of Internal Medicine, Chapel Hill 27514

Robert Anderson Huffaker, MD, P, 611 Long Leaf Dr., Chapel Hill 27514

Robert Edwards Huffman, MD, P, 340 Kimberly Ave., Asheville 28804

Lloyd Malcolm Higgins, MD, Path, 221 Millcrest Dr., High Point 27262

Hosea Dewain Ireland, MD, Pul, N. C. Sanatorium, McCain 28361

Philip Joel Kittner, MD, ObG, 21 Edwin Place, Asheville 28801
Louis John Kurten, MD, I, 2826 Millbrook Rd., Fayetteville 28303

Murphy Frank McGirt, MD, Or, 2208 Hodges Rd., Kinston 28501

Don Watson Powell, MD, I, UNC, Dept. of Internal Medicine, Chapel Hill 27514

Norman Jeffrey Robinson, MD, C, 1303 Cypress Grove Dr., Wilmington 28401

John Hunter Russell, MD, C, 509 Biltmore Ave., Asheville 28801

Richard Knight Steel, MD, I, UNC Dept. of Internal Medicine, Chapel Hill 27514

Edward Harris Wagner, MD, I, UNC Dept. of Internal Medicine, Chapel Hill 27514

John Benj. Wofford, MD, GP, P. O. Box 247, Saluda 28773



N 123

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wait for payment.

Recognize Blue Shield's Reciprocity symbol. It points the way to faster and more efficient payment, because now we make the payment first. The paperwork comes later, and we'll take care of that.

For complete details on just how Reciprocity works, contact your local North Carolina Blue Cross and Blue Shield Professional Relations Representative or the Professional Relations Department.



North Carolina Blue Cross and Blue Shield, Inc.

WHAT? WHEN? WHERE?

In Continuing Education February, 1972

I. Current Events in North Carolina February 15-March 21

Shelby Circuit Course

Place: Holiday Inn, Shelby

Sponsors: UNC School of Medicine and Cleveland County Medical Society

Type: 3 hrs/day 1 day/wk, for 6 weeks

Fee: \$5/meeting; \$25 total

For Information: UNC School of Medicine, Chapel Hill, 27514

February 16-March 22

Hickory Circuit Course

Place: Lake Hickory Country Club, Hickory

Sponsor: UNC School of Medicine and Catawba County Medical Society

Type: 3 hrs/day, 1 day/wk, for 6 weeks

Fee: \$5/meeting; \$25 total

For Information: UNC School of Medicine, Chapel Hill, 27514

Feb. 23

Topic: Cooperative Program in Continuing Education: Cardiology; Quality and Delivery of Health Care

Place: Brooke Valley Country Club, Greenville

Time: 2-10 p.m.

Sponsors: NCRMP; Bowman Gray, Duke and UNC Schools of Medicine; MSSNC

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For Information: Robert L. West, M.D., Pitt County Memorial Hospital, Greenville, 27834

March 13-24

Nursing Supervision in the Cardiac Unit

Sponsored by: The Continuing Education Division, School of Nursing, UNC and the N. C. Heart Association

Place: School of Nursing, Chapel Hill

Designed for nurses supervising patient care in cardiac units or teaching personnel in these units.

Fee: \$250. N. C. Residents may apply for partial tuition scholarship assistance, if needed, through the Johnston Awards.

For Information: Director, Continuing Education, School of Nursing, UNC, Chapel Hill, 27514

March 14

Seminar on Anaerobic Bacteriology

Place: School of Public Health, UNC, Chapel Hill

Time: 5:30 p.m.

Designed for physicians and laboratory personnel. Limited attendance. Apply before Feb. 25 to:

For Information: Mrs. Edna Knott, N. C. State Board of Health, Laboratory Division, P. O. Box 28047, Raleigh, 27611. Give name, address, phone number and reason for desiring to attend.

March 16

Wilson Memorial Hospital Annual Symposium: Surgical and Medical Aspects of Atherosclerosis

Place: Wilson Memorial Hospital, Wilson, 27893

Sponsors: Wilson Memorial Hospital and Wilson County Medical Society

May 1-2

Anatomical and Clinical Considerations of the Hand

Place: East Carolina University

Fee: \$100, practitioners & staff; \$50 residents

For Information: ECU, Division of Continuing Education, Box 2727, Greenville, 27834

May 18

23rd Annual Scientific Sessions of the N. C. Heart Association
Theme: "Sudden Death"

Place: White House Inn, Charlotte

For Information: Mr. Jim Street, 1 Heart Circle, Chapel Hill, 27514

May 20-24

Annual Meeting, MSSNC

Place: The Carolina, Pinehurst

For Information: Mr. William N. Hilliard, MSSNC, P. O. Box 27167, Raleigh, 27611

May 29

Congenital Anomalies of the Cardiovascular System: Thorax

Place: East Carolina University

Fee: \$50

For Information: ECU, Division of Continuing Education, Box 2727, Greenville, 27834

Broadening Horizons of Health Care Managements

Sponsored by: Continuing Education, School of Nursing, UNC, Chapel Hill, 27514

Place: Carrington Hall, UNC, Chapel Hill

1. Development of Leadership Skills

March 6-10

Tuition \$60

Designed for nurses in supervisory positions (supervisor, head nurse, charge nurse) and persons in similar positions in health-related fields

2. The Manager: Facilitator of Patient Care

April 17-22

Tuition \$75

Emphasis on effective utilization of communication in dele-

gation of responsibility and correlation of levels of care
Johnston Scholarship (for tuition only) available to N. C.
nurses who would otherwise be unable to attend
For Information: Mrs. Bonnie K. Hensley, Series Coordinator
Continuing Education, UNC School of Nursing, Chapel
Hill, 27514

1972 Refresher Course, N. C. Academy of Family Physicians
Alternate Sundays, Jan. 9-March 19
For Topics, see December issue of the *Journal*
Designed to prepare Academy members for Board Exam in
Family Practice and to cover common problems seen by
family doctors
Sponsored by: N. C. Academy of Family Physicians, Duke
University Medical Center, Bowman Gray School of Medi-
cine, UNC School of Medicine
Place: Bowman Gray School of Medicine, Babcock Auditorium,
Winston-Salem
Fee: \$100
Tape reels or cassettes available to Academy members at \$5.
For Information: Jack C. Knowles, Executive Secretary, 607
Gaston Street, Raleigh, 27602

II. Coming Events in North Carolina June 4-9

Seminar: Cooperative Program in Continuing Education
Sponsored by: NCRMP, MSSNC and 3 N. C. Schools of
Medicine
Place: St. Johns Inn, North Myrtle Beach, S. C.
For Information: Ron W. Davis, Ed.D., Coordinator of
Medical Education, MSSNC, 4019 N. Roxboro Road, P. O.
Box 8248, Durham, 27704

III. Out of State (Through May, 1972) February 23-25

Carcinoma of the Cervix
Fee: \$50
For Information: University of Tennessee, College of Medi-
cine, 800 Madison Avenue, Memphis, Tennessee 38103

February 25-26

25th Annual Stoneburner Lecture Series: "What is New in
Anesthesiology"
Fee: \$40
For Information: M. Pinson Neal, Jr., M.D., Assistant Vice
President and Director, Continuing Medical Education, Box
91, Medical College of Virginia, Richmond, Virginia 23219

February 25-26

Conference on Management of Patients with Renal Problems
For Information: Mrs. Helen O'Toole, Staff Assistant, Di-
vision of Continuing Education, MUSC, Charleston, S. C.
29401

February 29

Preview for Nurses: New Horizons for Hope in Respiratory
Care
Place: VA Hospital, Columbia, S. C.
For Information: Mrs. Ann Myers, S. C., TB-RD Association,
1817 Gadsden Street, Columbia, S. C. 29201

March 1-3

Endocrinology and Diabetes
For Information: University of Tennessee, College of Medicine,
800 Madison Avenue, Memphis, Tenn. 38103

March 6-9

The Alton D. Brashear Postgraduate Course in Head and Neck
Anatomy
For Information: Dr. H. R. Seibel, Assistant Professor of

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Anatomy, Box 91, Medical College of Virginia, Richmond, Virginia 23219

March 15-17

Psychiatry

Fee: \$50

For Information: University of Tennessee, College of Medicine, 800 Madison Avenue, Memphis, Tenn. 38103

March 15-17

Control of Infections in Hospitals and Institutions—Administrative

Sponsors: Center for Disease Control, DHEW, USPHS, Health Care Facilities Service, PHS

For Information: Center for Disease Control, DHEW, USPHS, 1600 Clifton Road, N.E., Atlanta, Georgia 30333

March 21-23

Greenville Postgraduate Seminar

Fee: \$20

Sponsors: Greenville General Hospital and Greenville County Medical Society; SCRMP

For Information: Greenville General Hospital, 100 Mallard Street, Greenville, S. C. 29601

March 22

Headache: Clinical and Neurologic Aspects

Sponsors: Vanderbilt University School of Medicine, Department of Neurology and Division of Continuing Education and Tennessee Mid-South RMP

Fee: \$15

For Information: Department of Neurology or Division of Continuing Education, Vanderbilt University School of Medicine, 110 21st Avenue, S., Nashville, Tenn. 27203

March 22

The Office in Medical Practice

Sponsors: Jackson-Madison County General Hospital, West Tennessee Consolidated Medical Assembly and Tennessee Academy of General Practice

For Information: Jackson-Madison County General Hospital, 708 West Forest, Jackson, Tenn. 38301

March 22-24

Orthopedics for the Family Physicians

Fee: \$60

For Information: University of Tennessee College of Medicine, 800 Madison Avenue, Memphis, Tenn. 38103

March 23

Problems of Aging

Fee: \$10

For Information: William S. Hall Psychiatric Institute, Box 119, Columbia, S. C. 29202

March 27-29

Neurology for the Pediatrician

Place: Emory University School of Medicine, Department of Pediatrics, 69 Butler Street, S.E., Atlanta, Ga. 30303

Fee: \$75 members; \$105 non-members

For Information: American Academy of Pediatrics, 1801 Hinman Avenue, Evanston, Illinois 60201

March 29-31

Children's Orthopedics

Place: Marriott Hotel, Atlanta, Georgia

Fee: \$150

For Information: American Academy of Orthopaedic Surgeons, 430 N. Michigan Avenue, Chicago, Ill. 60611

April 6-8

Annual Resident's Conference

Fee \$25

Sponsors: Medical University of S. C., Department of Ophthalmology, 80 Barre Street, Charleston 29401. Co-sponsor: S. C. RMP

April 8

Clinical Endocrinology

Fee: \$15

For Information: Vanderbilt University School of Medicine, Department of Medicine and Division of Continuing Education, 110 21st Avenue S., Nashville, Tenn. 37203

April 14

Pediatric Day: Sutton Lectureship

For Information: Box 91, Medical College of Virginia, Richmond, Va. 23219

April 16

11th Annual Medical Symposium

For Information: Bristol Memorial Hospital Bristol, Tenn. 37620

April 26-28

Gastroenterology

Fee: \$75

For Information: Medical College of Georgia, 145 Gwinnett Street, Augusta, Georgia 30902

May 2

Annual Scientific Assembly

Place: Medical College of Virginia

For Information: Box 91, Medical College of Virginia, Richmond, Virginia 23219

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May 3-5

Complications of Trauma

Place: Peabody Hotel, Memphis, Tennessee

Fee: \$150

For Information: American Academy of Orthopaedic Surgeons,
430 N. Michigan Avenue, Chicago 60611

May 8-11

The Medical and Surgical Treatment of Cardiovascular Disease

Place: Grady Memorial Hospital Auditorium, Atlanta, Georgia

Sponsors: Clinical Council of AHA; Emory University School
of Medicine

Fee: \$140 members of sponsoring groups; \$165 non-members

For Information: American College of Cardiology, 9650

Rockville Pike, Bethesda Maryland 20014

May 26

Annual Spring Forum for Child Psychiatry

Place: Medical College of Virginia

Sponsors: Medical College of Virginia, Box 91, Division of
Child Psychiatry, and Virginia Treatment Center for Chil-
dren, Richmond, Virginia 23219

May 26-27

Concepts in Health Care Delivery

Fee: \$15

For Information: Meharry Medical College, 1005 18th Avenue
N., Nashville, Tennessee 37208

Send information for listing to WHAT, WHEN, WHERE,
Box 8248, Durham, North Carolina, 27704. To be listed in a
specific issue, information must be received by the 10th of
the preceding month. Issues are scheduled for appearance on
the 15th of each month.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE WAKE FOREST UNIVERSITY

Dr. David R. Mace, professor of family sociology at
the Bowman Gray School of Medicine, is the author of
a new book, *Getting Ready for Marriage*, which was
released recently by the publisher, Abingdon Press of
Nashville, Tenn.

The 128-page book is aimed particularly at young
people who are contemplating marriage and is intended
to present to them the case for adequate marriage
preparation.

In this work, Dr. Mace makes available counseling
techniques he has used in dealing with young people.
He addresses couples personally and leads them to
consider such matters as the needs for marriage prepa-
ration, their individual plans and goals, their feelings
toward sex, in-laws, money management, children and
other possible problem areas. He includes a list of books
for additional reading and advice for those who feel
the need for further counseling.

Dr. Mace, who was appointed to the Bowman Gray

faculty in 1967, is an internationally known authority
on marriage and family life. He has worked in 60
countries, setting up services and organizations to help
families function better.

Getting Ready for Marriage is Mace's 17th book.
He also is the author of more than 1,000 articles on
marriage and family life. Perhaps his best known book
is *Success in Marriage*.

* * *

Researchers at Bowman Gray have come up with
preliminary evidence suggesting that vitamin C may be
involved in stimulating white blood cells to kill invading
bacteria, including the germs responsible for strep throat
and staphylococcus infections.

The three-man research team said that although it is
not absolutely proven, the evidence is strong that vita-
min C is one of the agents used by white cells to kill
bacteria.

Members of the team are Dr. Charles E. McCall,
associate professor of medicine; Dr. M. Robert Cooper,
associate professor of medicine; and Dr. Lawrence R.
DeChatelet, assistant professor of biochemistry.

They began their work two years ago in an attempt
to determine what role vitamin C plays in their func-
tion of white cells, the body's first line of defense
against infection.

The Bowman Gray scientists have been working with
human white cells in laboratory studies thus far. Ex-
periments with vitamin C in animals are just beginning.

Dr. McCall described one hopeful sign. A white cell
ingests a bacterium and in the process produces a
chemical, hydrogen peroxide. Hydrogen peroxide will
combine with vitamin C to produce a substance that is
very deadly to bacteria, he said.

* * *

Two Bowman Gray School of Medicine faculty mem-
bers participated in the eighth national meeting of the
Reticuloendothelial Society in Detroit, Mich. Dr.
Jean D. Acton, assistant professor of microbiology,
presented a paper on "Differential Inhibition of Pha-
gocytosis and Pinocytosis in Alveolar Macrophages Ex-
posed to NO₂." Dr. Lawrence R. DeChatelet, assistant
professor of biochemistry, spoke on "Stimulation of
Oxidative Metabolism in Polymorphonuclear Leuko-
cytes by Catecholamines."

* * *

Dr. Eben Alexander, professor of neurosurgery, re-
cently participated in a Postgraduate Course in Neuro-
surgical Techniques, sponsored by the Cleveland Clinic
Educational Foundation, in Cleveland, Ohio. He spoke
on "Injuries to the Craniovertebral Junction and Upper
Cervical Spine" and "Scoliosis—Neurologic and Neu-
rosurgical Aspects."

* * *

Three faculty members of Bowman Gray School of
Medicine participated in a meeting of the American
Society of Hematology recently in San Francisco, Calif.
Dr. M. Robert Cooper presented a paper on "The

New Myeloproliferative Disorders with Defective Phagocyte Bactericidal Activity." Dr. Charles L. Spurr, professor of medicine and director of the medical school's oncology center, spoke on "Lymphocyte Variants in Chronic Lymphocytic Leukemia." Dr. Donald Hayes, professor and chairman of the Department of Community Medicine, presented a paper on "Intensive Combination Chemotherapy for Lymphosarcoma and Reticulum Cell Sarcoma."

* * *

Dr. Julius Howell, associate professor of surgery, spoke on "Malpractice" at a recent meeting of the Health Education and Welfare Secretary's Commission on Malpractice in Washington, D. C.

* * *

Dr. Hugh B. Lofland Jr., professor of pathology, presented a paper on "Interaction Between Diet and Genetic Factors in the Regulation of Plasma Cholesterol Levels in Primates" at the National Food Writers Conference recently in Chicago, Ill.

* * *

Dr. Ross L. McLean, professor of medicine, participated in the 10th annual Physicians Seminar in Pensacola, Fla. He spoke on "Airborne Contagion—Transmission of Tuberculosis."

* * *

Dr. Richard T. Myers, professor and chairman of the Department of Surgery, and Dr. Frank R. Johnston, professor of surgery, participated in the Southern Surgical Association meeting in Hot Springs, Va. Dr. Myers spoke on "Misinterpretation, Abuses, Indications and a New Technique for CVP Monitoring." Dr. Johnston gave a paper on "Ultrasound in the Diagnosis of Liver Disease."

* * *

Dr. Robert A. Turner Jr., assistant professor of medicine, presented a paper on "Cellular and Humoral Aspects of Neutrophilic Phagocytosis in Rheumatic Disease" at a meeting of the American Rheumatism Association in San Diego, Calif.

* * *

Dr. Clark E. Vincent, professor of sociology and director of the Behavioral Sciences Center, participated in a Florida State Conference on "Improving Services to School-Age Pregnant Girls" recently in St. Petersburg. He spoke on "The Implicit Use of Family Members in Providing Supportive Services."

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Dr. R. Wayne Rundles, professor and chief of the division of hematology at Duke Medical Center, has been elected a director-at-large of the American Cancer Society. He will serve a two-year term.

The society has nearly two million volunteer workers

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Caution: Federal law prohibits dispensing without prescription.

Indications

Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications

Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings

When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexic effect, discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children Not recommended for use in children under 12 years of age.

Precautions

In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions

Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration

The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage

Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied

Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.

in the United States and raises more than \$60 million annually to support research projects, professional education and patient care.

* * *

A new book entitled *Prediction of Life Span*, edited by two Duke researchers, has been published.

The book, which presents the most recent findings of a longevity study at Duke and those at other institutions, was edited by Dr. Erdman Palmore, associate professor of medical sociology, and Miss Frances Jeffers, a former research associate at Duke's Center for the Study of Aging.

The book contains 21 chapters and it is divided into sections on the physical, psychological, and social factors which influence longevity.

An introduction by Palmore surveys the entire field of longevity as well as the problems associated with these studies. A concluding chapter summarizes all the findings of the book and discusses the future of longevity prediction studies.

The book concludes that it appears probable that the factors associated with longevity are usually associated with such generally desirable qualities as life satisfaction, productivity, and adequate functioning.

The expanding longevity research of the future should not only increase the quality, but should also improve the quantity of the human life span.

D. C. Heath and Company of Lexington, Mass., is the publisher.

* * *

Samuel R. Huston, formerly on the staff of the University Hospitals of Cleveland, Ohio, has been appointed an assistant director of Duke Hospital.

Huston is responsible for anesthesia, inhalation therapy, the operating rooms, the surgical unit, laboratories, and the blood bank.

A native of Cedar Falls, Iowa, Huston is a 1962 graduate of the University of Northern Iowa with a degree in business and chemistry. He earned his master's degree in hospital and health administration from the University of Iowa in 1964.

Prior to joining the staff at Cleveland, Huston was assistant administrator of the Mary Fletcher Hospital in Burlington, Vt., and later served as associate director for institutional affairs with the Northern New England Regional Medical Program.

He took a post as an administrative assistant at Cleveland in 1968 and was promoted to assistant administrator in 1969.

* * *

An additional \$12,000 has been granted for renewal support of a project called "Acyl Carrier and Acyl Carrier-Like Proteins" under the direction of Dr. Thomas C. Vanaman of the Department of Microbiology and Immunology. Funds awarded under the grant now total \$40,000, the National Science Foundation said.

* * *

Dr. Frank H. Bassett III, associate professor of

orthopaedic surgery, was a visiting professor in orthopaedic surgery at the University of Cincinnati in Cincinnati, Ohio, Nov. 10-13.

* * *

Dr. Johnnie L. Gallemore, Jr., assistant professor of psychiatry, recently delivered a paper to the Medical Correctional Association in New York City. It was entitled "Observations During Post-Riot Convalescence in a State Prison."

* * *

Dr. Nicholas G. Georgiade, professor of plastic, maxillofacial and oral surgery, has been elected chairman of the Plastic and Maxillofacial Surgery American College of Surgeons.

The chairmanship is for one year, but Georgiade's term on the council will extend over the next five years.

* * *

Dr. Robert Fowler, assistant professor of psychiatry, presented a paper which he co-authored at the Fifth World Congress of Psychiatry meeting in Mexico City December 3. The paper was entitled "'Free' vs. Private Hospitalization: Effect on Treatment."

* * *

Dr. Marc Amaya, assistant professor in the Division of Child Psychiatry, was elected to the council of the American Association of Psychiatric Services for Children during the group's national convention in Beverly Hills. Dr. Amaya also presented a paper at the meeting on the "Teacher-Student Relationship in an Inpatient Service for Children—A Dynamic Appraisal."

Attending the same convention was Dr. Thomas Haizlip, also of the Division of Child Psychiatry, in his capacity as chairman of the Southeastern Region of the AAPSC.

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

In its annual meeting on Dec. 15, 1971, the Regional Advisory Group of the North Carolina Regional Medical Program unanimously approved the recommendations of the nominating committee that these persons be made Regional Advisory Group members: Miss Sally Farrand, president of the North Carolina Physical Therapy Association, who was named by that group to replace Miss Ann Hodges as its representative; Mr. George M. Stockbridge, executive director of the Health Planning Council for Central North Carolina, who will represent Comprehensive Health Planning "b" Agencies; and Mrs. Marjorie B. Debnam, a Raleigh physician's wife and former social worker, public-at-large, representing Eastern North Carolina. Mr. Walter T. Johnson, Jr., a Greensboro attorney; Mrs. Alice C.

Kennedy, a Durham nursing instructor and North Carolina Mutual Life Insurance executive's wife; and Dr. Harvey L. Smith, professor and director of UNC's Social Research Section of the Division of Health Affairs, who has been associated with NCRMP since its inception and has provided NCRMP with data and input for program development; will serve as Regional Advisory Group members from the public-at-large representing Central North Carolina.

* * *

F. M. Simmons Patterson, M.D., executive director of the North Carolina Regional Medical Program; Ben F. Weaver, NCRMP deputy director and E. Harvey Estes, Jr., M.D., chairman of NCRMP's Regional Advisory Group, attended the National Meeting of Regional Medical Programs in St. Louis, Missouri on January 17-20.

The four-day meeting was attended by representatives from the 56 regional medical programs as well as the director and other staff members of Regional Medical Programs Service.

The theme of the meeting, "Improving Access and Availability of Medical Care," was explored through four topics: monitoring and improving the quality of care, improvement in emergency health services, better utilization and distribution of health manpower, and health services delivery systems.

NCRMP staff member who presented papers at the

meeting were Audrey Booth, R.N., director of the Professional Services Division; Ron W. Davis, Ed.D. director of the Continuing Education Division; Robert B. Lindsay, M.D. director of the Cancer Program Division, and William W. Lowrance, director of the Hospital Division.

* * *

The North Carolina Regional Medical Program and the Medical Society of the State of North Carolina held a jointly sponsored conference on health care delivery mechanisms in Greensboro on December 4-5, 1971. Despite heavy snow, over 50 of those invited to participate attended the two-day meeting.

Invitations were issued to a representative of each of the 77 local medical societies, State Medical Society leadership, selected leaders from other health agencies such as Comprehensive Health Planning and health insurance organizations, and participants in the California medical foundation site visit.

Patrick D. Kenan, M.D., associate professor, Division of Otolaryngology at Duke and chairman of the Medical Society's Committee on Health Care Delivery, was program coordinator. The keynote speaker was F. William Dowda, M.D., president-elect of the Medical Association of Georgia. Dr. Dowda's topic was "The Development of a Peer Review Foundation in Georgia."

NCRMP's Regional Advisory Group and staff were

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well represented in both attendance and participation. Charles W. Styron, M.D., President of the State Medical Society and RAG member, issued a short welcome to conference participants. Dr. Lee Holder, NCRMP director of planning and evaluation and a member of the California site visit team, spoke on Health Maintenance Organizations. Dr. Holder's talk focused on the definition of HMOs and the similarities and differences between HMOs and medical foundations.

John Glasson, M.D., President-Elect of the State Medical Society and a RAG member, summarized a paper which he had written for the conference on "Foundations of Peer Review," leading a discussion on the structure and function of peer review as it related to various aspects of health care delivery and delivery mechanisms.

RAG members Edgar T. Beddingfield, Jr., M.D., past president of MSSNC; Christopher Fordham, M.D., dean of the UNC Medical School; and George Hider, president of the North Carolina Health Insurance Council, participated in a "reactor panel." The panel, which discussed the presentations of Dr. Holder and Dr. Glasson as well as a presentation on "Foundations on Health Care Delivery" by Lawrence Cutchin, M.D., was chaired by Dr. Beddingfield.

A combined workshop was conducted on minimum insurance standards, peer review and medical care standards, fee schedules and relative value scale, and utilization standards and review. RAG member Ken Beeston of N. C. Blue Cross-Blue Shield served as co-chairman of the discussion on minimum insurance standards.

Also present were RAG members E. Harvey Estes, Jr., M.D., Louis deS. Shaffner, M.D., Emmett Sellers, N. C. State Board of Social Services, and Elmer Johnson of Comprehensive Health Planning, as well as Robert Lindsay, M.D., director of NCRMP's Cancer Division.

* * *

A new and important component of the Comprehensive Cancer Program is the development of cancer program in regional hospitals. These self-selected hospitals, which include Valdeese General Hospital, Lenoir Memorial Hospital, Cleveland Memorial Hospital, and Catawba Memorial Hospital, are medium-sized, with adequate staff, facilities, and motivation to establish relationships with surrounding smaller hospitals and to assist to upgrade cancer care in those hospitals.

The key element to development of these cancer programs in Lenoir Memorial, Valdeese General, and Cleveland Memorial is a cancer coordinator who is responsible for coordinating cancer activities involving patient, physician, and paramedical agencies. Cancer coordinators are also responsible for linkages with the local Cancer Society, the Department of Social Services, the North Carolina Division of Vocational Rehabilitation, the State Board of Health, and NCRMP.

Cancer programs in these hospitals include cancer

teaching seminars, tumor boards and conferences, participation in the NCRMP-generated Cancer Registry, and cooperation with NCRMP and other related cancer programs. At Catawba Memorial, a tumor board is being established in order to facilitate, coordinate, and improve cancer treatment.

Coordinators named to date are Dorothy McMurray, M.D., at Cleveland Memorial and Mrs. Sarah K. Hedrick at Valdeese General.

* * *

Dr. B. Lionel Truscott, director of NCRMP's Stroke Program, presented a paper on "Risk Factors and Quality of Survivorship in Cerebrovascular Disease" at the Stroke Directors' Conference held in Miami, Florida Feb. 3-4. The conference, sponsored by the Neurological Institutes of Health, is a cerebrovascular clinical research center workshop with participants from medical centers throughout the country.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

Six North Carolina physicians have just been appointed or reappointed by the American Medical Association to Council or Committee membership, according to information received by the State Medical Society Office in Raleigh.

Dr. Charles W. Styron of Raleigh, President of the Society, was reappointed to the Council on Foods and Nutrition.

Dr. Edgar T. Beddingfield, Jr., of Wilson and Stantonsburg, was reappointed a member of the Council on Legislation.

Dr. George W. Paschal of Raleigh was reappointed a member of the Council on National Security and was also reappointed a member of the Community Emergency Services of the AMA.

Dr. William G. Anlyan, Vice President for Health Affairs at Duke University, was reappointed a member of the Council on National Security. He was chairman of the American Association of Medical Colleges for 1970-1971.

Dr. Mario C. Battigelli of Chapel Hill, associate professor of medicine at the University of North Carolina School of Medicine, was appointed a member of the Council on Occupational Health.

Dr. Frank W. Jones of Newton was reappointed to the AMA Disability Insurance Claims Review Committee. He is currently a North Carolina delegate to the AMA.

The six North Carolinians were among approximately 300 named by the AMA on a nationwide basis to the 27 committees and councils. The appointments were made by the Board of Trustees of the AMA following its recent annual review of the membership of its councils and committees.

NORTH CAROLINA BLUE CROSS AND BLUE SHIELD

Significant savings of both time and money are being realized by patients and hospital alike in an experimental outpatient surgical unit operating at the Watts Hospital in Durham.

In response to growing concern over the rising cost of hospital care and increasing shortage of hospital beds, Watts Hospital and North Carolina Blue Cross and Blue Shield, Inc., joined forces early last year to sponsor a special hospital ambulatory surgical unit at the Durham community hospital, in an effort to determine whether some of the uncomplicated operations now being performed in general hospitals could be successfully handled on an outpatient basis at lower costs and with greater efficiency.

Patients chosen by their physicians to participate in the study receive hospital care, but do not occupy a hospital bed customarily provided for inpatients undergoing the same procedure.

Following required laboratory and x-ray studies which are performed in the 48 hours prior to admission, patients arrive at the unit early in the morning. They then undergo physical examinations and pre-anesthetic evaluation required of inpatients and proceed through the usual operating room and recovery room routines. After this the patients return to the unit for further observation and are discharged home in the late afternoon by their surgeon. They are provided a follow-up visit in their homes on the first or second post-operative day by a member of the unit's nursing staff to check on any postoperative complication and to provide assurance to the patient and answer any questions.

Some of the 43 different types of operations which have been performed through the Ambulatory Surgical Unit include excision of breast tumors, cysts, and cervical polyps; D and C; hernia and nerve repair; body cast change; therapeutic abortion; tonsillectomy and adenoidectomy, reduction of fractures and full mouth extraction.

In a study made to evaluate the first nine months of the Ambulatory Surgical Unit, Watts physicians James E. Davis, chief of the surgical staff and the unit's director, and Don E. Detmer have found a saving of 25 per cent in hospital costs and a time saving of about two days per patient for operations done on an outpatient basis. At the same time there has been favorable response from all concerned parties—patients, surgeons, insurance carriers, and hospital administration—according to a paper describing the results of the program presented by Dr. Davis at a recent meeting of the Southern Surgical Association.

During the nine-month period from February 1 through October 31, 1971, 364 patients, ranging from 8 weeks to 69 years of age, were treated on an ambulatory basis at the special surgical unit, which was established in existing but formerly under utilized facilities on the ground floor of Watts Hospital.

Twenty-six of a possible 41 staff surgeons—63 per cent—operated on patients using the unit during the study period. The choice of outpatient care rather than hospital admission was made by the physician who based his decision on whether the patient was surgically and psychologically qualified for such care. The patient population was willing to accept care in the manner deemed appropriate by the surgeon. Within 10 different specialties, 43 different types of operative procedures were performed.

All of the participating surgeons noted the time savings and expressed confidence that outpatient care at the unit allowed the same quality of care as delivered to inpatients with greater comfort and less cost to both the patient and the hospital. The physicians have urged continuing the unit's operation and have pledged their continuing support.

For its part in the study, North Carolina Blue Cross and Blue Shield agreed to pay usual allowances for operating room, recovery room, anesthesia, laboratory, and x-ray on the same basis as if admitted in accordance with the subscriber's certificate provisions. In addition, the Corporation agreed to provide special benefit allowances in lieu of room for its subscribers who utilize this special service for the holding area accommodations and nursing care and post-operative nurse visit in the home.

John Alexander McMahon, Blue Cross and Blue Shield president, praised the experiment and pledged his organization's continued cooperation. "The success of this innovative program is dramatic evidence of the savings that can be realized in time and money for patients, physicians, providers, and prepayment plans alike when they cooperate wholeheartedly for the mutual benefit of all."

McMahon said he hoped to see the program established in other appropriate locations throughout the state and in other states.

AMERICAN COLLEGE OF SURGEONS

Dr. James F. Alexander of Charlotte is among a group of 242 physicians in the United States and Canada who have met the high standards of the American College of Physicians and have been admitted as members of the 56-year old international medical specialty society. The College dedicates itself to upgrading medical care, teaching and research through stringent standards of membership and programs of continuing education.

Hugh R. Butt, M.D., Rochester, Minn., president of the American College of Physicians and professor of medicine at the Mayo Graduate School of Medicine, University of Minnesota, said the new members have met the College's requirements by presenting evidence of their eligibility to take the national board of certification in internal medicine or a related specialty field. New members must also have graduated from a medical school at least six years prior to their appli-

cation and have been a practitioner, teacher or researcher in internal medicine for at least two years. The College also has two other major membership categories—fellows and masters.

News Note

David G. Welton, M.D., of Charlotte was among those honored during the fifteenth annual convention of the American Association of Medical Assistants, held in Atlanta in November, 1971. At the completion of his three-year term as a national adviser to this organization, Dr. Welton was given their Outstanding Service Award.

Dr. Welton is still serving as a member of the Certification Board of the AAMA and serves also on the Executive Committee of the Certifying Board.

More medical assistants achieved certification this past year than on any other occasion. Two medical assistants from North Carolina, Mrs. Blanche G. Elmore of Rockingham and Mrs. Brenda E. Stout of Newland, were among those certified in 1971.

NATIONAL INSTITUTES OF HEALTH

The cooperation of physicians is requested in the referral of patients with carcinoma of the lung for clinical study and treatment by the Radiation Branch of the National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

All previously untreated patients with a tissue or unequivocal cytologic diagnosis of bronchogenic carcinoma, who are unresectable because of local extension only, or who refuse surgery, will be considered. Patients who have had an attempted partial resection, or patients with serious medical complications contraindicating surgery, are not acceptable.

Physicians interested in having their patients considered for admission to this study may write:

Kent B. Lamoureux, M.D.
Clinical Center, Room B3B-38
National Institutes of Health
Bethesda, Maryland 20014
* * *

The cooperation of physicians is requested in the referral of patients with thyroid carcinoma for a continuing study being conducted by the National Institute of Arthritis and Metabolic Diseases at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Needed are patients with thyroid carcinoma that concentrates I-131 and is not subject to surgical cure. Selected patients will be admitted for evaluation and study, and specific therapy will be initiated if desired. A hospital stay of several weeks should be anticipated.

Physicians interested in having their patients considered for admission to this study may write:

Richard Sachson, M.D.
Clinical Center, Room 8N-262
National Institutes of Health
Bethesda, Maryland 20014

Emergency Shipment of Antimalarial Agent Sped to North Carolina Victim in Four Hours

Barely four hours after Winthrop Laboratories received an urgent request from a North Carolina hospital, a desperately-needed medicine was administered to a young Vietnam war veteran, seriously ill with malaria.

That swift dispatch of the potent anti-malarial agent, Aralen (brand of chloroquine), from New York to North Carolina, may very well have saved his life, according to authorities at High Point Memorial Hospital. The 21-year-old soldier was discharged from the hospital recently to return to the Army, where treatment is being continued.

Shortly after 4 p.m. on July 23, Winthrop Laboratories, a division of Sterling Drug Inc., received a telephone request from the hospital for an injectible form of Aralen, designed for acute emergencies when the patient is too ill to be given the usual tablet form of the medication.

The injectible Aralen was located in Winthrop's emergency room, and rushed to Newark Airport, where it was taken by the pilot of United Airlines Flight 657 to Greensboro, N. C. The pilot handed the shipment to a waiting North Carolina State Police officer, who raced the remaining few miles to the hospital.

The life-saving medicine was administered to the patient around 8 p.m. Shortly after the first dose was injected, there was a sudden, dramatic fall in the young man's temperature. Another injection and two oral doses of Aralen were administered before he was placed on maintenance therapy with another Winthrop anti-malarial, Primaquine, to prevent a relapse.

Hospital officials said the young man was home on 30 days leave in High Point when he became seriously ill. A month earlier he had discontinued the preventive medication he had been taking during his tour of duty in Vietnam. He was the most seriously infected malaria victim the hospital has ever treated, it was said.

Innovative Medical Program Meets Dual Needs

A local community hospital, because of a shortage of doctors, is unable to adequately serve the community. A local medical school, because of affiliation with a regional referral hospital, feels that its students also need exposure to medical practice on the primary care level.

A program known as the chiefs of service program and funds from the Z. Smith Reynolds Foundation have made it possible for Reynolds Memorial Hospital in Winston-Salem and Bowman Gray Medical School, affiliated with Baptist Hospital, in Winston-Salem, to join in a cooperative effort toward solving the problem.

This evolutionary program is not only alleviating the two basic needs but is also realizing an added advantage of community involvement. Doctors, both black and white, are joining to serve the hospital in a predominantly black community. Social workers and public health nurses, as part of the program, are going out

into the community to see that medical needs are met and to supervise follow-up of patient care. The interaction has brought more qualified medical care to the community and has in turn made the hospital and medical school more aware of their community and its needs.

The idea for a chiefs of service program was conceived in 1966, and under the leadership of Dr. Joseph G. Gordon, then medical director at Reynolds Memorial, plans were laid and proposals were made. In June, 1968, the Z. Smith Reynolds Foundation, with headquarters in Winston-Salem and charter by-laws that restrict grants to projects in North Carolina, appropriated \$600,000 to support the cooperative program.

With funds available, Dr. Gordon and Dr. Manson Meads, then dean of the Bowman Gray Medical School, were able to put their plans into action.

The program proposes four full-time chiefs of service at Reynolds Memorial in pediatrics, obstetrics and gynecology, medicine, and surgery. A chief of service is a specialist in his field, holding full-time teaching and staff physician status with both the school and the hospital. His salary is paid by the Z. Smith Reynolds grant.

As physician and teacher, the chief provides medical attention while he teaches the students.

The second step in the program involves medical students at Bowman Gray. Each intern and resident spends some part of his training at Reynolds Memorial

and the rest at Baptist. The schedules are arranged so approximately the same number of doctors will be available at Reynolds at all times. Also, junior and senior students can elect to spend five weeks' duty at Reynolds Memorial. All students are under the supervision of the chief in their particular field of practice.

A typical schedule for the chiefs will explain how the coordination is carried out. For example, Dr. William Quivers, chief—pediatrics, conducts rounds with the students each morning at Reynolds. On Monday, Tuesday, and Thursday mornings he supervises outpatient clinics at Reynolds. Dr. O'Neal, residents and interns assist him. On Wednesday mornings he holds a "well-baby" clinic as follow-up on children who have been ill and also for monitoring-research work on indigent problems in the community such as sickle-cell anemia. Also on Wednesday is "Grand Rounds" at Baptist Hospital. Here patient cases from Baptist and Reynolds are presented and discussed as part of the teaching program. The afternoons are spent with the students and house staff at Reynolds with the various patients—again on a teaching-administering basis. Each of the other chiefs follows the same general routine.

Much has been accomplished in these three years. Through the outpatient clinic and its social worker follow-up, many people have been treated properly before a situation could become critical. This has meant fewer admissions to the hospital, but this too has become an advantage as doctors now have more beds

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and more time to spend with the critically ill. In 1969 approximately 400 people were treated through the clinic. In 1970, 2,200 were treated. They come as referrals from the social worker or public health nurse, from the emergency room of Reynolds, or from word-of-mouth by other patients of the clinic.

John Noble, administrator of Reynolds Memorial, feels a distinct advantage of the program has been a general upgrading of all medical services there. "For example," he says, "the nursing staff through exposure to the teaching-observation sessions with the students, have learned how to improve their care of each patient and what to look for as danger signals."

Another valuable asset of the program has been the cooperation with two social workers and two public health nurses. These four people are hired to go out into the community served by Reynolds Memorial to learn of the medical needs, to see that the hospital becomes aware of them, and to supervise follow-up of patient care once the patient leaves the hospital.

"Without these people the program would not have been as successful," says Dr. Gordon, "because they are actually going out into the community as physical proof of the community involvement the hospital is working for."

Finally, the medical school has also benefited, realizing an expansion of educational opportunities for students. Before the program, the medical environment for the students was limited to Baptist Hospital. Because Baptist is a large, regional hospital with many practicing specialists, this meant that students were exposed mainly to specialized, advanced cases of illness. "Now," says Dr. Manson Meads, "through exposure to Reynolds—a community hospital, our students are involved in an atmosphere of first contact-primary care medicine. Now also, they are aware of the role the hospital plays in a community and thus are better equipped to begin practice in the specific community they choose to live."

There is still much to be done however. For Reynolds the primary need is still for more doctors. The program has been able to attract specialists as chiefs because of the continuing education and financial security offered. The original grant will sustain the program through June, 1973.

However, the chief can not carry the work load by himself. He must have supporting doctors to assist him in order to give the qualified care needed. For example, the community served by Reynolds Memorial has a population of approximately 48,000. In 1968, with 26 physicians practicing in the area, the doc-

tor/patient ratio was one per 1,850 people. Now through the program, Reynolds has a consulting physician affiliation with 80 doctors and 30 attending physicians on hand. Still, that's a large ratio.

Another vital need is for trained, qualified "back up" people such as lab technicians, inhalation therapists, radiologists, nurse's aides, etc. "Without these people in the hospital," says Dr. Weston Kelsey, chairman, Bowman Gray Department of Pediatrics, "the doctor, no matter how well trained he is, is unable to provide quick, efficient diagnosis and care. Naturally if a doctor has to wait two days for a test result because of lack of personnel to process it quickly, his ability to provide quality care is hampered."

"Until this program provided the answer," says Dr. Gordon, "attracting a physician to practice in a low-income area was difficult. Now, we hope that Reynolds can eventually support an in-hospital group practice which would be enticed here by the prospect of medical school affiliation and financial stability."

Film on Physical Therapy Made Available

Geriatric Pharmaceutical Corporation has made available prints of a 16 minute, 16 mm color and sound film entitled "Decision." The film was prepared in cooperation with the Self Employment Group of APTA and selected pharmaceutical manufacturers, and was filmed at the University of California Department of Physical Medicine and Rehabilitation.

The film is tailored to students at the high school or early college level, and portrays the background and activities of the physical therapist. It follows the activity of the therapist through his professional training and practice, in the classroom, in the hospital, in the office and in the home. The film is strictly noncommercial, no products or devices are advertised or recommended.

"Decision" is of invaluable assistance to RPT's who are called upon by civic and other groups to talk about their work, since its comprehensive explanations cover virtually every facet of the profession. It can simplify and shorten the oral explanation by the RPT and has been found to generate a lively "question and answer" period after its viewing.

The film is especially valuable for administrators and educators, for viewing by students who might be interested in pursuing a career in Physical Therapy.

Arrangements for booking on loan can be made by writing to Mr. Gustave Bardfeld, Director of Clinical Research, Geriatric Pharmaceutical Corporation, 397 Jericho Turnpike, Floral Park, N. Y. 11001.

LAWRENCE MICROFILM SERVICE

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Phone: 919-552-5178

Winter Driving Tip

Drive slow enough to retain control of your car on snow and ice. If your car starts to skid on ice, keep your foot off the brake and steer in the direction of the skid. Don't follow other vehicles too closely.

Month in Washington

The Price Commission restricted increases in a physician's fees to 2.5% a year when justified by increases in his costs, but granted the right of appeal to the Internal Revenue Service for a further increase for those physicians with greater increases in their costs of conducting a practice.

The official regulations went into effect Dec. 29, a day before they were published in the Federal Register. The commission earlier had announced guidelines on which the regulations were based.

The regulations require that a physician maintain a schedule of fees and increases with a sign in his office that such a schedule is available for inspection. But he does not have to post them in his office.

After issuance of the regulations, AMA officials continued meetings with federal officials in efforts to effect modifications of provisions considered unfair to physicians. The meetings started before issuance of the guidelines.

One meeting was with Donald Rumsfeld, director of the President's Cost of Living Council, a few days before the regulations were issued. Dr. Max H. Parrott, chairman of the AMA Board of Trustees and head of its delegation, voiced strong exceptions to some of the price control provisions which would deny treatment equal to that given other providers of professional services.

The Price Commission has ruled that "a non-institutional provider of health care services may charge a price in excess of the base price only to reflect allowable costs in effect on Nov. 14, 1971, and allowable cost increases incurred after Nov. 14 reduced to reflect productivity gains, and only to the extent that such increased price shall not result in an increase in such provider's profit margin as a percentage of revenues, before income tax, over that prevailing in the base period, providing, however, that the provider's aggregate price increases shall not exceed 2.5% per year."

The AMA has pointed out that the Price Commission's 2.5% limitation on the increase of physicians' fees was discriminatory inasmuch as other providers of services could reflect actual increases in cost by a "pass through" of such costs, a procedure denied physicians under the proposed regulations.

The AMA also pointed out that while the Price Commission urged increased physician productivity, the proposed regulations might well decrease productivity.

The physician cannot generally work longer hours than he is presently working, the AMA position paper said. He can expand his office space, purchase new

testing and diagnostic aids, and employ more staff. But held to a 2.5% fee increase—in the face of higher costs—he is apt to do none of these things.

The AMA paper also took exception to the proposed requirement for the posting . . . or having available . . . a fee schedule. It is simply not practical for a physician to arrive at a schedule of prices for each and every one of the numerous services he renders, the AMA said, pointing out that it was its understanding that the Committee on Health Services Industry — an advisory body to the Price Commission—recognized this fact and had recommended that posting be limited to institutional providers.

The AMA also pointed out that the proposed guidelines do not provide for a procedure under which physicians whose fees are below the norms in their communities may adjust their fees. Physicians usually maintain their fees for several years and then increase them by 10% or 20% to counter inflation, rather than impose annual increments of 25 or 50 cents, the AMA said, insisting that the proposed regulations should contain reasonable criteria for handling unusual situations such as these.

At the suggestion of Mr. Rumsfeld, the AMA has taken its case directly to C. Jackson Grayson, Jr., chairman of the Price Commission and additional meetings have been scheduled. The full text of the AMA's position paper on this subject has been forwarded to all state medical societies.

* * *

President Nixon signed into law a sharply stepped-up program to combat cancer.

In signing the legislation before several hundred leaders in the field at a White House ceremony, Nixon expressed "hope that in the years ahead we will look back on this as the most significant action taken during this administration."

The new law, which authorizes expenditure of \$1.6 billion in the next three years, gives the National Cancer Institute partial autonomy and puts it to a large extent under the White House although it remains in the National Institutes of Health.

Its chief will be appointed by the President, its activities monitored by the president by a special three-man advisory board, and its budget submitted directly to the White House.

Nixon predicted the new organizational setup "will enable us to mobilize far more effectively both our

In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®

(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent, 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemo-

Trobicin®

sterile spectinomycin dihydrochloride
pentahydrate, Upjohn
single-dose intramuscular treatment

High cure rate: * 96% of 571 males, 95% of 294 females

(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of *Neisseria gonorrhoeae* in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

*Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluable and were not included.

J472 1848-6

globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: Vials, 2 and 4 grams—with ampoule of Bacterio-

satic Water for Injection with Benzyl Alcohol 0.9% w/v. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.

Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.

For additional product information, see your Upjohn representative or consult the package insert.

MED-B-1-5 (LWB)

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

human and our financial resources in the fight against this dread disease."

The revamped organizational structure is a compromise between proposals to establish a separate, wholly independent cancer authority under the White House and to leave NCI in NIH but with a greatly expanded program.

The main thrusts of the new cancer research program are being developed by a committee of 280 nongovernment scientific consultants and will be completed by March.

The prime goal will be to find drugs that are effective against "slow growing" tumors-malignancies that affect such organs as the lung, breast, colon and bladder and account for 85% of the 650,000 new cancer cases a year.

The President also signed into law a \$673.6 million bill financing continuance of the federal government's programs to aid medical, dental, nursing and allied health schools. It was about \$150 million more than the administration requested, but \$200 million below the figure approved by the Senate. Medical and dental schools were allotted \$460.4 million, compared with the administration's request for \$366 million. Nurses got \$145 million.

* * *

An American Medical Association spokesman said a solution to the medical malpractice problem must be found "which will provide equitable protection for the patient and the physician and which will not contribute unreasonably to the cost of medical care."

Dr. Arthur J. Mannix, Jr., of New Rochelle, N. Y., outlined the AMA's position at a hearing of the government's special Commission on Medical practice. Dr. C. A. Hoffman, AMA president-elect and chairman of the AMA Professional Liability Committee, is a member of the Commission.

"The physician should be permitted to treat his patient in an atmosphere of mutual trust and confidence, without continual threat of malpractice charges," Dr. Mannix said.

Some means must be found which will provide equitable protection for the patient and the physician and which will not contribute unreasonably to the cost of medical care. The physician should be permitted to treat his patient in an atmosphere of mutual trust and confidence, without continual threat of malpractice charges.

New systems, perhaps one based on scheduled benefits, or a system of limited and well-defined "no fault" coverage may be the answer. We recognize that many questions will have to be considered when any major change is contemplated. Will the patient population, for example, be willing to yield its rights to adversary litigation as they know it now? In the interests of reduced medical care costs, would they accept, as another example, scheduled compensation perhaps limiting recovery to economic losses? In any event, any viable solution will have to be based on acceptance by the public.

"We believe that additional experimentation with a

variety of means may lead to a more satisfactory resolution of the problems facing us. The physicians of this country would welcome measures alleviating the many problems present today in the practice of medicine as it relates to malpractice liability. . . . The American Medical Association offers to this Commission its assistance as solutions are sought to this complex problem."

* * *

The American Medical Association opposed further government restrictions on barbiturates.

Dr. Henry Brill, a member of the AMA's Committee on Alcohol and Drug Dependence, pointed out to the Senate Juvenile Delinquency Subcommittee that barbiturates and other sedative drugs already are subject to tight controls under a federal law—penalties for illicit sale, restrictions on refilling of prescriptions, and mandatory registration by physicians who prescribe or dispense them.

"To add to the present restrictions on barbiturates so as to reduce medical overuse would be a disservice to patients who need them," Dr. Brill said. "Not only would it be more difficult to prescribe and administer such drugs in the treatment of numerous illnesses and disease, it would inevitably raise the costs of hospital care in direct proportion to the additional record keeping and reporting that would be required of these institutions, where so great a proportion of sedatives are used in therapy.

"On the other hand, we vigorously support efforts to control street traffic and diversion of drugs. We also subscribe to and support the intensification of education and persuasive techniques to help assure the proper utilization of these drugs in medicine. We would urge medical schools to incorporate comprehensive material on drug abuse and drug dependence in their curriculums, stressing the importance of an accurate assessment of the abuse and dependence potential of patients when psychoactive drugs are medically indicated. Continuing education efforts should stem largely from drug utilization committees in hospitals where both the medical staff and house officers, together with nursing personnel, can benefit from an ongoing evaluation of prescribing practices."

* * *

The federal government reported at the end of 1971 that outbreaks of influenza were hop-scotching across the country in a fashion typical of the 1969 epidemic that struck an estimated 30 million Americans.

The National Center of Disease Control (NCDC), a part of the Department of Health, Education and Welfare with headquarters in Atlanta, Ga., said some of the influenza has been identified as the Hong Kong variety and some as "influenza-like." School absenteeism ranging as high as 30 per cent was reported by communities hardest hit by the bug.

The influenza struck swiftly and spread rapidly. Practically no outbreaks were reported by state health departments in a telephone survey conducted by the NCDC on Nov. 17-18. But another phone survey con-

ducted Dec. 21 revealed outbreaks in New England, the middle Atlantic states, midwest, south and the far west. The Hong Kong influenza "has been documented in Connecticut, Kansas, Michigan, New Jersey and Utah," the NCDC said.

"Increased influenza-like disease has been reported from Colorado, Idaho, Indiana, Louisiana, Maine, Mas-

sachusetts, Montana, New Mexico, Oregon, South Dakota and Wyoming," the center said.

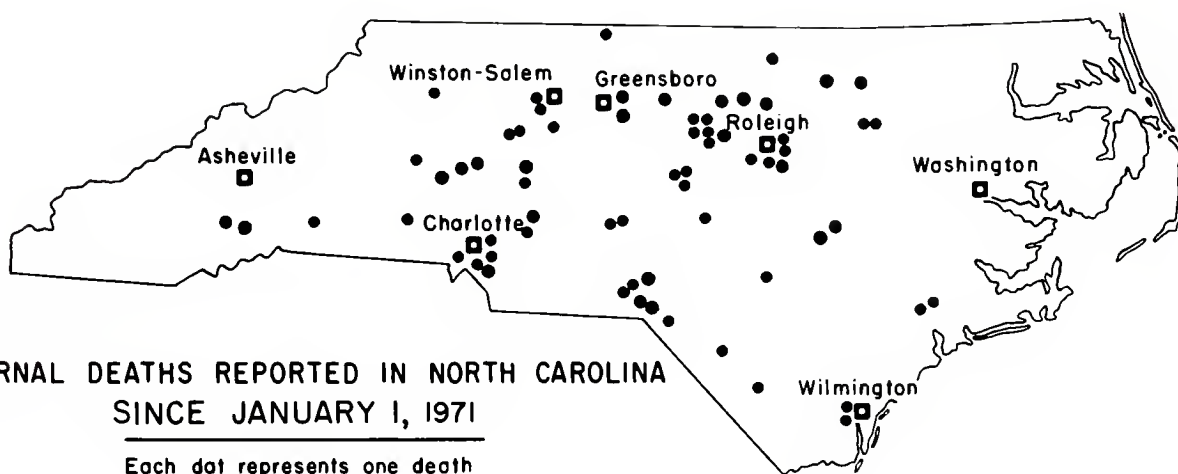
The disease was reported to have caused mild symptoms in its victims.

The World Health Organization said that influenza epidemics, much of it caused by the Hong Kong virus, have broken out in both eastern and western Europe.

Classified Ads

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BOARD CERTIFIED GENERAL SURGEON, in mid 50's, in large Southern City, would like to re-locate in North Carolina.—Please Reply to: P. O. Box 27167, Raleigh, N. C. 27611



**TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
NOVEMBER 1971 AND MOST RECENT 12-MONTH TOTALS**

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	November 1971	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	November 1971	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries			
	November 1971	December 1970 - November 1971				November 1971	December 1970 - November 1971			November 1971					December 1970 - November 1971	November 1971			December 1970 - November 1971		
NORTH CAROLINA	117	1796	68903	26.1	87	1302	29375	44.3													
ALAMANCE	1	40	1245	32.1		14	460	30.4	PENDER		2	146	-			2	148	-			
ALEXANDER	1	16	303	52.8		1	35	-	PERQUIMANS		2	71	-				62	-			
ALLEGHANY		2	110	-			7	-	PERSON	2	7	282	24.8			1	12	224			
ANSON	1	6	202	29.7	3	17	295	57.6	PITT	4	18	681	26.4			1	18	685			
ASHE	1	10	308	32.5			2	-	POLK		3	134	-				1	27			
AVERY	1	13	248	52.4			1	-	RANDOLPH	2	41	1248	32.9				8	123			
BEAUFORT	9	425	21.2		1	17	250	68.0	RICHMOND		12	489	24.5			1	12	285			
BERTIE	8	84	-			11	239	46.0	ROBESON	1	16	638	25.1			3	74	1641			
BLADEN	9	244	36.9		1	8	211	37.9	ROCKINGHAM	2	37	1012	36.6			3	21	411			
BRUNSWICK	7	358	19.6			6	167	35.9	ROWAN	1	31	1189	26.1				15	333			
BUNCOMRE	2	63	2026	31.1		16	284	56.3	RUTHERFORD	2	26	725	35.9			5	157	31.8			
BURKE	2	25	1019	24.5	3	8	83	-	SAMPSON	1	3	448	-				21	361			
GABARRUS	3	19	1017	18.7	1	9	306	29.4	SCOTLAND	2	11	331	33.2			1	12	320			
CALDWELL	23	1137	20.2		3		114	-	STANLY		15	657	22.8				6	126			
CAMDEN	4	64	-				35	-	STOKES		10	388	25.8				2	61			
CARTERET	1	18	553	32.5			90	-	SURRY		30	849	35.3				2	62			
CASWELL	1	6	140	42.9			153	39.2	SWAIN			122	-				1	67			
CATAWBA	4	45	1543	29.2	1	7	224	31.3	TRANSYLVANIA		14	303	46.2				37	-			
CHATAM	2	12	356	33.7		10	174	57.5	TYRRELL		1	25	-				3	37			
CHEROKEE		8	260	30.8		1	10	-	UNION	2	19	802	23.7			1	23	348			
CHOWAN	4	96	-			5	110	45.5	VANCE	1	6	325	18.5				16	356			
CLAY	3	83	-						WAKE	8	82	3131	26.2			3	40	1101			
CLEVELAND	1	38	1018	37.3	1	16	417	38.4	WARREN		3	78	-				7	178			
COLUMBUS	15	570	26.3		2	11	362	30.4	WASHINGTON		3	140	-				19	149			
Craven	1	29	1205	24.1	2	21	398	52.8	WATAUGA	1	14	354	39.5				1	5			
CUMBERLAND	5	80	3922	20.4	7	70	1616	43.3	WAYNE	3	30	1159	25.9			2	32	626			
CURRITUCK		1	65	-			39	-	WILKES	2	33	857	38.5				5	68			
DARE		3	98	-		1	11	-	WILSON		12	499	24.0			1	15	534			
DAVIDSON	3	44	1610	27.3		17	256	66.4	YADKIN		8	370	21.6				27	-			
DAVIE	2	8	312	25.6		2	58	-	YANCEY		5	205	24.4				1	-			
DUPLIN		9	412	21.8		12	307	39.1	Cities												
DURHAM	2	38	1408	27.0	1	42	943	44.5	City totals are also included in county totals												
EDGECOMBE	1	9	429	21.0		22	546	40.3	ALBEMARLE		2	145	-			1	35	-			
FORSYTH	3	56	2623	21.3	4	40	1211	33.0	ASHEBORO		5	183	27.3				20	-			
FRANKLIN		3	188	-		15	255	58.8	ASHEVILLE	1	25	638	39.2			14	259	54.1			
GASTON	5	67	2620	25.6	1	19	477	39.8	BURLINGTON	1	15	498	30.1			7	155	45.2			
GATES	1	1	49	-		2	69	-	CHAPEL HILL		8	289	27.7			3	70	-			
GRAHAM		2	105	-			9	-	CHARLOTTE	6	57	2922	19.5			8	91	2074			
GRANVILLE	9	200	45.0			24	324	74.1	CONCORD	1	7	201	34.8			1	4	126			
GREENE	1	5	80	-		9	133	67.7	DURHAM	1	22	860	25.6			1	37	837			
GUILFORD	6	87	3644	23.9	8	82	1715	47.8	EDEN	1	10	201	49.8			2	65	-			
HALIFAX	16	420	38.1		3	33	606	54.5	ELIZABETH CITY		2	114	-			1	95	-			
HARNETT	1	19	662	28.7	2	25	301	83.1	FAYETTEVILLE		20	1032	19.4			5	41	615			
HAYWOOD	17	694	24.5			1	17	-	GASTONIA	4	26	757	34.3			1	9	229			
HENDERSON	3	26	696	37.4			49	-	GOLDSBORO		9	283	31.8			1	14	260			
HERTFORD			136	-	2	18	267	67.4	GREENSBORO	1	41	1784	23.0			4	52	1097			
HOKE		2	134	-		11	236	46.6	GREENVILLE	1	9	282	31.9			7	202	34.7			
HYDE	1	3	48	-		4	55	-	HENDERSON		3	148	-				6	157			
IREDELL	1	30	972	30.9		14	343	40.8	HICKORY		11	297	37.0			2	105	-			
JACKSON		4	276	-		3	64	-	HIGH POINT	3	26	776	33.5			4	22	429			
JOHNSTON	2	19	824	23.1	2	22	329	66.9	JACKSONVILLE	1	11	413	26.6			1	76	-			
JONES			85	-		3	103	-	KINSTON	1	7	263	26.6			15	235				
LEE	2	9	430	20.9	1	8	203	39.4	LENOIR		2	192	-				2	52			
LENOIR	1	18	572	31.5	1	29	439	66.1	LEXINGTON		13	267	48.7			7	94	-			
LINCOLN	1	15	556	27.0		3	121	-	LUMBERTON	1	5	221	22.6			10	202				
MCDOWELL	2	10	536	18.7		1	53	-	MONROE		1	145	-			9	105				
MACON	3	220	-				5	-	MORGANTON		7	116	60.3			2	26	-			
MADISON	2	10	219	45.7		3	8	257	31.1	NEW BERN		6	169	35.5			2	8			
MARTIN	4	216	-		3	8	257	31.1	RALEIGH	5	44	1461	30.1			3	28				
MECKLENBURG	8	91	4713	19.3	10	103	2394	43.0	REIDSVILLE		3	154	-			2	8				
MITCHELL		6	225	26.7			2	-	ROANOKE RAPIDS		7	198	35.4			2	36	-			
MONTGOMERY	4	242	-			7	126	55.6	ROCKY MOUNT E	1	1	114	-			5	140				
MOORE	17	464	36.6		1	12	270	44.4	ROCKY MOUNT N	1	5	245	16.7			1	6				
NASH	1	9	610	14.8	4	14	501	27.9	SALISBURY		2	193	-			5	137				
NEW HANOVER	3	36	1302	27.6	1	19	459	41.4	SANFORD	1	4	160	-			1	4				
NORTHAMPTON		1	95	-	1	13	325	40.0	SHELBY	1	9	175	51.4			3	111				
ONSLOW	3	55	2387	23.0		11	418	26.3	STATESVILLE	1	8	228	35.1			5	158				
ORANGE	1	15	790	19.0	2	17	235	72.3	THOMASVILLE		6	207	29.0				7	92			
PAMLICO		2	80	-		2	72	-	WILMINGTON	3	21	591	35.5			1	18				
PASQUOTANK	7	262	26.7			4	166	-	WILSON		7	248	28.2			6	233				
									WINSTON SALEM	1	27	1257	21.5			4	38				

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

The Official Journal of THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA □ □ March 1972, Vol. 33, No. 3

NORTH CAROLINA

Medical Journal

IN THIS ISSUE: Visual Acuity After Surgery for Retinal Detachment, Harold N. Jacklin, M.D.; Post-Traumatic Pulmonary Insufficiency: A Physiologic Basis for Treatment, H. J. Proctor, M.D.; The Geriatric Patient and the Nursing Home, Ewald W. Busse, M.D.; The Placenta—an Overlooked Organ, William D. Bradford, M.D.; Preliminary Program of the 118th Annual Session.



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The negative power of undue anxiety
in congestive heart failure...

This man thinks he can no longer
take breathing for granted.

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SYMPOSIUM ON COMPUTERS AND BUSINESS MACHINES IN MEDICAL PRACTICE

FOR MEDICAL SOCIETY MEMBERS
AND THEIR CLINIC MANAGERS

Thursday, March 30, 1972

Medical Society Building
222 North Person Street, Raleigh

10:00	Charles W. Styron, M.D.—President	Welcome—Symposium Objective
10:15	AMA Sound-Slide Presentation—	Computers for Medical Billing
10:30	Eric Marler, M.D., F.A.C.P.— I.B.M. Medical Industry Marketing	New Strategic Directions (In Health Care)
11:00	Discussion—Questions & Answers	
11:15	William N. Hilliard, Executive Director	The Name of the Game is Paperwork
11:20	J. T. R. Brownridge— Professional Billing Corp., Charlotte	Specialized Computer Billing & Insur- ance Form Preparation for Physicians
11:40	Henry Bertrand, Jr.— Clinic Manager, Wilson Clinic	Machines and People
12:00 NOON	Discussion—Questions & Answers	
12:15	Adjourn for Lunch	
2:00	Mrs. Charlotte Sedam— IBM Medical Industry Marketing	Office Computers for Clinical Account- ing
3:45	Discussion—Questions & Answers	
4:00	Arthur E. Davis, Jr., M.D.—Chm., Comm. on RVS	RVS, CPT, & CMIT Coding and Nomen- clature
4:20	Discussion—Questions & Answers	
4:30	Charles W. Styron, M.D.—	On Target—Adjourn

Preregistration Card enclosed
with the March Public Relations Bulletin

Officers 1971-1972

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		<i>Student AMA Chapters (SAMA)</i>	



PRESIDENT'S NEWSLETTER

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

No. 10

March 1, 1972

Computers and Business Machines in Medical Practice - one-day program, March 30, 1972, 10:00 a.m. to 4:30 p.m. Place - Headquarters Building, Raleigh, North Carolina. Principal speaker will be Eric Marler, M. D., F. A. C. P., distinguished physician, mathematician, and linguist, who is a medical executive of IBM. His title will be New Strategic Directions in Health Care. There will be other topics of practical interest and the program will be available shortly.

N. C. Blue Cross - Blue Shield, Inc., now agrees that its notice about COORDINATION OF BENEFITS procedure should not stand. Failure of a physician to complete Item 13 will NOT result in the claim form being returned to the doctor. The Corporation says it will take other steps to avoid unauthorized payment where the subscriber also has other coverage.

Oregon Medical Association suspended 11 members for failure to satisfy compulsory continuing education requirements for 1970. 600 members were excluded from the requirement. Arizona also has compulsory continuing education. It seems to me that American physicians have demonstrated continuous and improved practice without compulsory programs.

Donald B. Koonce, M. D., Wilmington surgeon, named a member of Advisory Committee on Cancer by AMA Board of Trustees. Dr. Koonce is a past president of the Medical Society and is a state delegate to the AMA.

North Carolina Medical Care Commission approved on January 28, 1972, modification of procedure to provide a full and adequate hearing in cases where certificate of need application is contested. If a hospital, nursing home, or extended care facility wishes to expand or if a new such health care facility is considered, a certificate of need must be issued by the Medical Care Commission. Details may be obtained from Mr. I. O. Wilkerson, Jr., Assistant Executive Director of the Medical Care Commission.

Ralph W. Coonrad, M. D., is the new medical director of the North Carolina Cerebral Palsy Hospital in Durham. He replaced Dr. Lenox Baker who resigned to become Secretary of the Department of Human Resources. Dr. Coonrad was recently appointed to the State Board of Health by Governor Scott.

Thus far 40 medical students have become full members of the Medical Society. Dues are \$3.00 per year with all privileges of membership.

Stephen Morris, President, American Hospital Association, stated that AHA "must begin publicly to assert role as the principal spokesman not only for America's hospitals, but for all health care providers as well." I was under the impression that health care providers (physicians) and their societies acted as their own spokesmen. Mr. Morris statement has about as much chance of becoming reality as the AHA Ameriplan which has a similar philosophy. As you know Ameriplan is deceased.

All chairmen of committees engaged in third party negotiations met at Headquarters on February 24, 1972, and discussed the many problems associated with insurance companies and government. Suggestions were made to improve third party negotiations. The Committee on Third Party Payors will develop an educational manual for use by physicians and medical assistants in understanding third party activities. We hope that a meeting of these chairmen will be held yearly.

Social Security Administration directed Part B carriers to notify physicians of the terms and obligation of the assignment agreement. Carriers are being asked by Social Security Administration to increase their monitoring efforts and if necessary to request medical societies to aid them in stemming violations of the assignment agreement. The assignment requires the physician to accept the carrier's determination of the allowable charge for a service and this charge must be accepted as full payment. The assignment agreement cannot be revoked by one party alone. An easy way to solve this problem is to refuse assignment in Medicare.

American Nursing Association and National League for Nursing have indicated concern about adverse effects that physicians' assistants could have upon the physician-nurse-patient relationships. American Nursing Association and the various state nursing associations are becoming intensely interested in the extended role of the nurse in patient care.

Second Annual Sports Medicine Symposium scheduled July 2 - 4, 1972, at Blockade Runner, Wrightsville Beach, N. C. The program is for mornings only with afternoons free for recreation. Homer Rice, Athletic Director, UNC-CH, will be a featured speaker.

North Carolina Dietetic Association, Inc., Diet Manual, First Edition, 1972, available at \$6.24 per copy. Checks or money orders payable to North Carolina Dietetic Association, Inc., Mrs. Alice Heimback, R. D., Diet Therapy Section Chairman, 3300 Redbud Lane, Raleigh, North Carolina 27607.

Best wishes and

Sincerely yours,

Charles W. Styron
Charles W. Styron, M. D.
President

Post-Traumatic Pulmonary Insufficiency: A Physiologic Basis for Treatment

H. J. Proctor, M.D.

Post-traumatic pulmonary insufficiency, adult respiratory distress syndrome, "wet lung," and "shock lung" are terms that have been recently applied to the pulmonary insufficiency associated with non-thoracic trauma. Whether this altered pulmonary function is a form of "traumatic wet lung" described in World War II by Burford¹ and Brewer,² or indeed is a new syndrome is not clear.

The syndrome occurs following severe trauma or surgery, and may be associated with the infusion of large volumes of salt solution and either plasma or whole banked blood or both. Equally frequent is the association of shock, sepsis, fat emboli, alterations in the clotting mechanism, and the occasional prolonged administration of high concentrations of oxygen.

CLINICAL FEATURES

Typically the syndrome is characterized by apparently successful initial resuscitation. The chest roentgenogram is clear, and arterial oxygen pressures (Po_2) are maintained between 70 and 90 mm of mercury. The patient usually has a mild mixed respiratory and metabolic alkalosis as a result of hyperventilation and the infusion of citrated blood.^{3, 4}

There follows a symptom-free period which may last from a few hours to several days. Persistent hyperventilation is an important sign that progressive respiratory difficulty may be developing. There is increasing difficulty in maintaining a satisfactory ar-

terial Po_2 . If the patient is given a trial of breathing 100 percent oxygen for 20 minutes, the arterial oxygen saturation does not increase as much as would be normally expected.

A period of progressive respiratory insufficiency then ensues. Serial chest roentgenograms illustrate progressive, fluffy opacification of both lung fields. Transient improvement may be obtained if respirator therapy is instituted late in the syndrome, but the arterial Po_2 progressively decreases in spite of increasing concentrations of inspired oxygen.

The patient then enters the final phase of the syndrome. The arterial Po_2 may be less than 40 mm of mercury, while pure oxygen is being administered. Bilateral opacification of the lung fields are indicated on chest roentgenograms. Progressive acidosis, anoxia, hypotension, and copious amounts of foamy tracheal secretions eventually result in death.

At autopsy the lungs are red, wet, congested, and atelectatic, with intra-alveolar hemorrhages, capillary engorgement, and interstitial and alveolar edema.

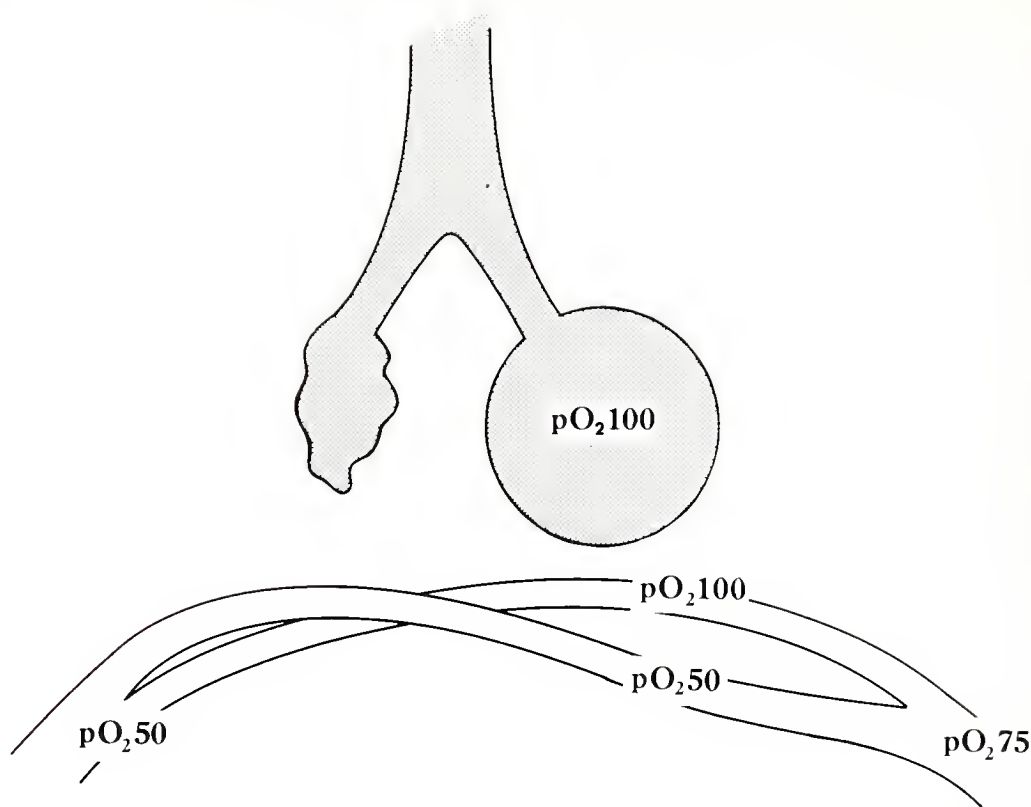
Participants in two national symposiums^{5, 6} were unable to agree upon a single etiologic agent that is responsible for this syndrome. With the lack of such knowledge, it becomes important to examine the alterations in pulmonary function occurring in association with trauma, shock, and resuscitation, and on this basis to devise a rational plan of therapy.

ALTERED PULMONARY FUNCTION

Deaths from post-traumatic pulmonary insufficiency are partly the result of an inability to oxygenate the blood. The low arterial Po_2 measured in

Read before the Section on Surgery, Medical Society of the State of North Carolina, Pinehurst, May 17, 1971.

From the Department of Surgery, University of North Carolina School of Medicine, Chapel Hill, N. C. 27514.



Ventilation Perfusion Imbalance

Fig. 1. The alveolar-capillary unit on the left has an excess of perfusion over ventilation.

patients with this syndrome is almost always the result of a ventilation-perfusion imbalance.³ Expressed more simply in diagrammatic form (Fig. 1), poorly ventilated alveoli continue to be perfused by venous blood. There is an excess of perfusion for the available ventilation. Regardless of its concentration, the inspired oxygen is never delivered to the alveolus on the left (Fig. 1), and unsaturated blood

from this portion of the lung will continue to drain into the left atrium with resulting lowering of the arterial P_{O_2} .

This failure to respond to the inspiration of 100 percent oxygen forms the basis of a diagnostic test to determine the cause of the decrease in arterial P_{O_2} . The patient is allowed to breathe 100 percent oxygen for 20 minutes. Because of the uneven distribution of inspired gases in patients of this type, at least 20 minutes are necessary for complete washout of nitrogen. After 20 minutes the oxygen tension in the alveolus should approximate 670 to 680 mm of mercury. An oxygen tension this high should overcome any barrier to diffusion and raise the arterial P_{O_2} to at least 550. Values less than 550, or alveolar-arterial (A-a) gradients greater than 120 (670-550), indicate that a significant percentage of the cardiac output is being "shunted" through the lung, bypassing the alveoli.

The actual percentage of the cardiac output being "shunted" may be calculated by using the formulas of Berggren⁷ and Rahn and Farhi.⁸ If only the A-a gradient is known, and if the arterial P_{O_2} is greater than 100, a reasonably accurate estimate of the shunt can be made as illustrated in Figure 2.

The proportion of cardiac output "shunted" in a series of Vietnam battle casualties ranged from 18 percent to 35 percent.

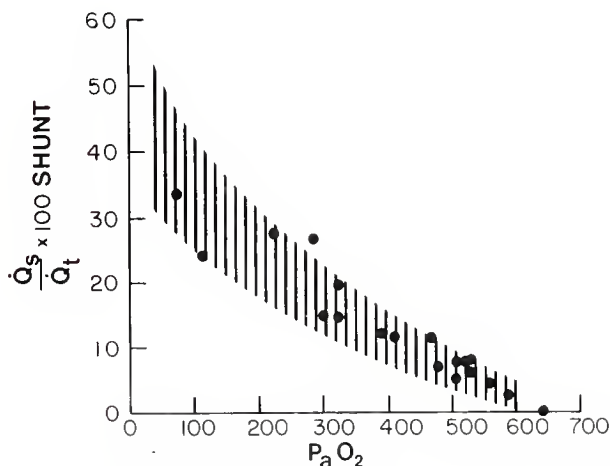


Fig. 2. Relationship between arterial P_{O_2} and percent of cardiac output "shunted" (redrawn after data from Moore, F.D., et al: "Post-traumatic pulmonary insufficiency," W. B. Saunders Company, 1969).

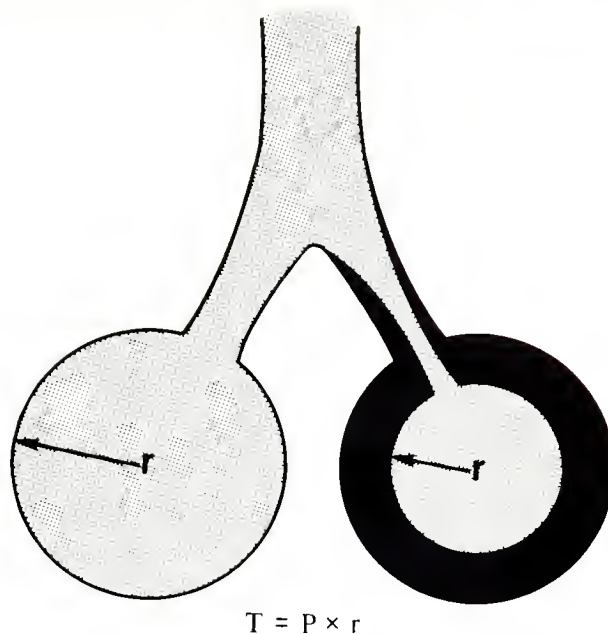
The difficulty of raising the arterial Po_2 having been established, it seems of little value to expose patients to the hazards of oxygen toxicity¹⁰ to gain a few millimeters' increase in the arterial PO_2 . Arterial oxygen pressures of 60 were well tolerated by young, healthy combat casualties.³

Atelectasis is generally assumed to be the predominant factor responsible for the ventilation-perfusion imbalance. Literally, this is an example of "collapsed airlessness," such an airless alveolus distal to a mucous obstruction of a terminal bronchiole. Other examples of airlessness include alveoli filled with edema fluid, detritus, leukocytes, or retained secretions. Good ventilation and vigorous endotracheal suctioning will help to clear the aveoli of this material.

An alveolus may be partially filled with fluid and yet prone to collapse. This paradox may be explained by Laplace's law, which states that the tension in the wall of a distensible sphere is proportional to the radius and the pressure in the lumen ($T=P \times r$). It follows, therefore, assuming a constant pressure in the lumen, that a decrease in radius will lead to rather sudden collapse at a critical, closing radius, owing to the inability to maintain sufficient tension on the wall to insure an inflated state.

As interstitial fluid accumulates (Fig. 3), the radius decreases making collapse more likely. Simultaneously, surfactant is being inactivated by the fluid accumulating in the alveolus,¹¹ raising the surface tension at the tissue-air interface, also enhancing collapse.

A method of maintaining alveoli with a large enough radius so that available tension on the wall is sufficient to maintain inflation has been applied successfully by Ashbaugh.¹² Expiration is normally accomplished passively. If forced to expire against resistance, patients will increase their functional residual capacity (Fig. 4), storing more elastic energy in the chest wall to accomplish expiration. By incorporating this measure with positive pressure ventilation, alveoli are maintained in a hyperinflated state,



La Place's Law

Fig. 3. Interstitial edema in the alveolus on the right decreases the radius and makes collapse more likely.

and even at end expiration, the alveolar radius is sufficient to maintain wall tension above the closing level.

In spite of the higher intrathoracic pressures resulting from this technique of ventilation and the associated theoretical reduction in venous return, Ashbaugh was unable to document a significant reduction in cardiac output.

Pulmonary capillary perfusion is normally governed in part by alveolar oxygen tension,¹³ an important mechanism to prevent capillary-alveolar perfusion abnormalities. Thus as airless alveoli develop a low arterial Po_2 , the capillary perfusion of these alveoli is decreased, with preferential redistribution of pulmonary arterial blood to better ventilated por-

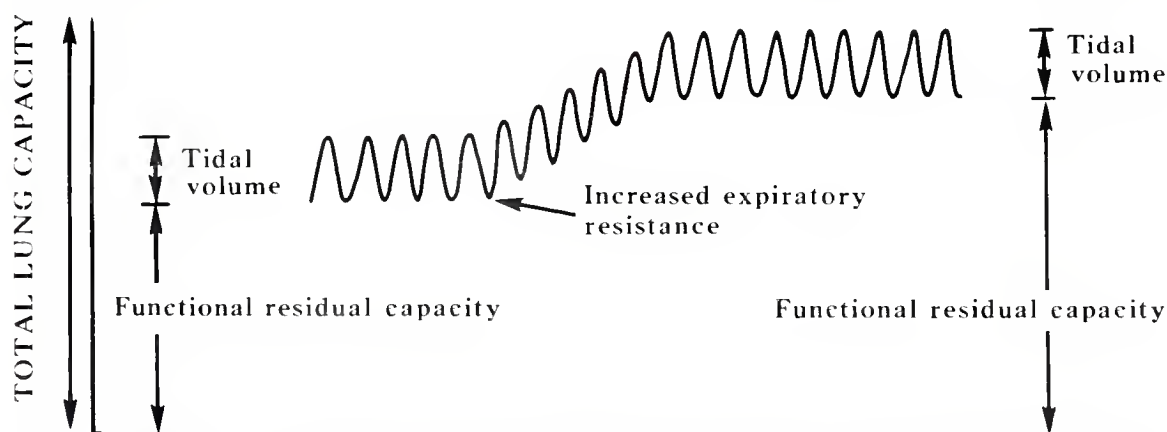


Fig. 4. Increase in the functional residual capacity after institution of expiratory resistance prevents atelectasis.

tions of the lung. Following trauma and operation an increase in cardiac output, and thus an increased flow through the lungs, have been noted by myself and others.^{14, 15} This may cause a pressure rise in the previously non-perfused capillaries greater than the critical opening pressure of that capillary.¹⁶ Thus capillaries to the nonventilated alveoli would again be perfused, and the protective mechanism to prevent alveolar capillary perfusion abnormalities would not function.

Gump¹⁷ has documented the presence of additional water in the lungs of postoperative patients. Sladen and others¹⁸ have successfully used diuretics to "dry out" the lungs and improve function. Thus the problem of airlessness may also be treated by reducing edema.

In addition to perfusion of non-ventilated alveoli, Kopriva and co-workers¹⁹ have noted ventilation of non-perfused alveoli in combat casualties in Vietnam. This increase in "physiologic" dead space, an example of ventilation in excess of perfusion, means that much of the inspired air serves no useful purpose in terms of either oxygenating the blood or eliminating carbon dioxide. It is apparent, therefore, that an excess either of ventilation or of perfusion leads to extremely inefficient utilization of inspired air.

To accomplish ventilation, the body expends energy to overcome elastic forces and flow-resistive forces.²⁰

I and others have demonstrated that the lungs of a series of Vietnam casualties had decreased compliance. As a result there was an increase in the elastic work of breathing and thus more energy expended per liter of ventilation. These casualties also had a rapid, shallow pattern of respiration. By decreasing the tidal volume, and not distorting the relatively inelastic lungs, they were able to achieve a normal work cost per breath. Whether the decreased tidal volume was the cause or the result of the normal work per breath is not clear. Current work in our laboratory²¹ supports the concept that the rate and depth of respiration are adjusted to maintain the work per breath in the normal range.

Thus patients with post-traumatic pulmonary insufficiency utilize their ventilation inefficiently as a result of perfusion of underventilated alveoli, and ventilation of underperfused alveoli. This inefficiency occurs at a time when the ventilatory needs are increased to meet the increased oxygen demands resulting from the accelerated metabolic rate in the post-injury period. The patient is forced to move more air at a high work cost per liter when contrasted with normal controls. In moving these large volumes of air, patients with post-traumatic pulmonary insufficiency adopt a pattern of rapid, shallow respiration, a pattern which leads to progressive retention of secretions, progressive atelectasis, and a further increase in ventilation-perfusion imbalance.

TREATMENT

It has been our experience that this altered pulmonary function may be best treated by tracheal intubation and controlled, positive pressure ventilation, with the addition of expiratory resistance if necessary. This enables good suctioning of tracheal secretions, adequate tidal volumes, and a sufficient increase in the functional residual capacity to inflate airless alveoli. It also reduces physiologic shunting and delivers the increased ventilation necessary to provide adequate oxygenation. Through controlled respiration we are able to relieve the patient of the added burden of the work of breathing.²¹

We prefer a volume-controlled respirator, one that enables us to control accurately the percentage of oxygen administered, maintaining it below 40 percent if possible, and also one which periodically "sighs" the patient, thus renewing the surfactant.

Occasionally, to provide adequate oxygen excessive ventilation is required, causing respiratory alkalosis. Additional dead space may be added to maintain the arterial carbon dioxide pressure at satisfactory levels.

If respirator support is felt to be necessary for periods longer than 48 hours, as it frequently is, we usually replace the nasotracheal tube with a cuffed tracheostomy tube.

Grillo²² has commented on the dangers of prolonged endotracheal intubation, both with nasotracheal tubes and with tracheostomy tubes. Consequently, although we are extremely lenient in our use of respirators, we do not resort to intubation until we have demonstrated that frequent endotracheal suctioning, frequent changes in position, intermittent positive pressure ventilation with bronchodilators, and supplemental oxygen administration do not provide adequate oxygenation for the patient.

Our current approach to therapy in patients with post-traumatic pulmonary insufficiency may be summarized as follows:

1. The relationship between the intravenous administration of fluids, both salt solutions and colloidal suspensions, and post-traumatic pulmonary insufficiency has not been fully elucidated. Until this is done, following the initial restoration of circulatory dynamics the intravenous administration of fluids should be restricted to the maintenance of volumes commensurate with adequate arterial pressure, central venous pressure, and urinary output.

2. Patients should be turned in bed at hourly intervals to avoid dependent pulmonary edema, and encouraged to breathe and cough deeply, with endotracheal suctioning if necessary.

3. Although physiologically unsound for the reasons stated earlier, the administration of supplemental oxygen at an inspired concentration of 40 percent or less, employing either a nasal catheter or an oxygen head bag, will frequently maintain adequate

oxygenation (an arterial Po_2 of 60 mm of mercury or higher with no indication of progressive acidosis), and should be tried initially to avoid the hazards of intubation.

4. If these measures fail to maintain adequate arterial oxygenation, tracheal intubation and controlled, positive pressure ventilation is instituted, with the addition of expiratory resistance if necessary.

It has been our observation that respirator therapy is most beneficial when implemented at the first indication that the more conservative measures outlined in steps 1-3 are inadequate.

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Chancres are superficial, callous, eating ulcers; which may happen either with or without a gonorrhoea. They are commonly seated about the glands, and make their appearance in the following manner: First a little red pimple arises, which soon becomes pointed at top, and is filled with a whitish matter inclining to yellow. This pimple is hot, and itches generally before it breaks; afterwards it degenerates into an obstinate ulcer, the bottom of which is usually covered with a viscid mucus, and whose edges gradually become hard and callous. Sometimes the first appearance resembles a simple excoriation of the cuticle; which, if the cause be venereal, soon becomes a true chancre.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 346.*

The Placenta—an Overlooked Organ

William D. Bradford, M.D.

AT every delivery there is a potential orphan known as the placenta. In the delivery room the obstetrician's responsibility is to the mother. If a pediatrician is in attendance, he is concerned with the infant. The placenta may be consigned to untrained personnel and discarded without attention.

This review indicates how a brief examination of the organ can yield information that may be useful in the care of the newborn infant. Clues to infection, fetal distress, congenital malformations, zygosity (in cases of twins), and transfusion syndromes may be corroborated by the hospital pathologist.

NORMAL APPEARANCE

The placenta is a discoid mass of tissue measuring from 15 to 20 cm in diameter and 1.3 to 3 cm in thickness. Together with the umbilical cord and its investing membranes—the amnion (inner thin, translucent membrane) and chorion (the outer thicker, opaque membrane)—it weighs from 500 to 600 gm at term. The chorionic plate (fetal surface) is shiny steel-blue to gray, with prominent fetal veins and less prominent fetal arteries converging at the insertion of the umbilical cord. The decidua plate (maternal surface) is composed of cotyledons (lobules) which are soft, spongy, and dark red or purple. The umbilical cord is 40 to 60 cm in length, and its transected

surface contains one large vein and two smaller arteries.

ABNORMALITIES IN SIZE, SHAPE, AND COLOR

Placental size and weight may vary with many factors such as length of gestation and maternal nutrition. In providing a rough guide to the differential diagnosis of large placentas, some major causes are erythroblastosis fetalis, syphilis, congenital nephrosis, toxoplasmosis, cytomegalic inclusion disease, and renal vein thrombosis. It should be kept in mind that the largest human placentas are associated with polyhydramnios (excessive amniotic fluid). At the opposite end of the spectrum, small placentas are often found in association with premature birth and in diabetic mothers with chronic renal disease.

The placenta may assume almost any form. Although usually discoid, it may be band-like, horse-shoe-shaped, bilobed or trilobed, or it may have accessory (succenturiate) lobes.

THE UMBILICAL CORD

The relation of the attachment of the umbilical cord to the placental surface is determined at the time the zygote becomes implanted in the pregnant endometrium by the position which the inner cell mass assumes in relation to the uterine wall. In the majority of cases (64 percent) the cord is inserted eccentrically in the placenta, in 25 percent centrally, in 10 percent marginally, and in 1 percent in the

Read in part before the Section on Pathology, Medical Society of the State of North Carolina, Pinehurst, May 17, 1971.
From the Department of Pathology, Duke University Medical Center, Durham, N. C. 27710.

membranes (velamentous insertion).¹ The velamentous group is particularly at risk, for these vessels lying in loose, unsupported tissue are easily stretched and torn, particularly when they cross the cervical opening as it dilates during labor.

The length of the umbilical cord is important. Very long and very short cords are noticeable at a glance. Extremely long cords are more likely to be looped around the neck or extremity of the fetus. Looping may be associated with partial or complete vascular occlusion or even fetal death. Extremely short cords are compatible with survival, but may lead to abruptio placenta, inversion of the uterus, or intrafunicular hemorrhage (bleeding within the umbilical cord), thus causing death of the fetus by exsanguination. It is of interest that extremely short umbilical cords may be associated with defects in the abdominal wall and eventration of the viscera.

Umbilical cords may be looped to form true knots. This anomaly is found in 4 percent to 5 percent of all deliveries, and is more likely to occur when the cord is excessively long.² A tight knot may be lethal to the fetus. Spiraling, twisting, torsion, and thrombi in the cord have been reported as causes of intrauterine and fetal death. Such observations are difficult to interpret, because the torsion, thrombi, or twisting may have occurred during or after delivery.

MAJOR ANOMALIES AND COMPLICATIONS

The fetal surface of the placenta may be reduced by the interposition of decidual tissue (pregnant endometrium) between the amnion and chorion at the periphery of the placenta. On gross observation this tissue appears as a yellow peripheral hyalinized ring circumscribing the fetal placental surface (circumvallate placenta). This anomaly is associated with premature labor through an increased incidence of retroplacental hemorrhage. It is estimated that about 30 percent of all nontoxic placental separations are due to this anomaly, and that it is a major cause of midtrimester abortion.³

Single umbilical artery

By merely viewing the transected surface of the umbilical cord the diagnosis of single umbilical artery is made. One umbilical artery is absent in 1 percent of all consecutive single placentas, and in 7 percent of all twin placentas.⁴ An increased incidence of congenital malformations is associated with the absence of one umbilical artery. The overall incidence of associated malformation was 28.6 percent in a recently published series.⁵ Absence of an umbilical artery does not indicate one organ system in particular which is more likely to be affected, and major cardiac, renal, and skeletal deformities have been described. Of particular interest is that autosomal trisomies 13-15 and 17-18, Down's syndrome, and thalidomide embryopathy are associated with this

anomaly. It has also been found in infants of diabetic mothers.

Amnion nodosum

The term "amnion nodosum" should be familiar to the pediatrician. The amniotic surface is covered by uniform granular brown nodules of vernix, fat, desquamated epithelial cells, fibrin debris, mononuclear cells, and lanugo. Amnion nodosum is clearly associated with decreased amounts of amniotic fluid (oligohydramnios). While the reasons for oligohydramnios vary, the most common cause is a defective fetal urinary tract. The presence of amnion nodosum alerts the pediatrician to the possibility of severe congenital malformation in the infant. The best known malformation is renal agenesis, which when associated with a characteristic facies and pulmonary hypoplasia is known as Potter's syndrome.⁶ Other causes of decreased amniotic fluid and amnion nodosum include prolonged leakage of fluid and retention of a dead fetus. Amnion nodosum has been found in acardiac twins and in the oligohydramnios of the smaller of monochorionic twins in the "transfusion syndrome."

Placental infections

Pus on the surface of the placenta is a certain sign of intrauterine infection. The normally shiny, steel blue appearance of the fetal surface will be dull and milky. The normally prominent vascular pattern is difficult to recognize, and the amniotic fluid is cloudy. The dull, milky color is due to the presence of polymorphonuclear leukocytes, and the placental membranes, and amniotic fluid may have a foul odor. In such an environment, the ingestion of infected amniotic fluid by the fetus readily leads to neonatal pneumonia presenting as respiratory distress. Otitis media and neonatal meningitis are other serious sequelae of amniotic infections that must be recognized as early as possible. Examination of the placenta often provides the first evidence of neonatal infection.

Bacterial infections of the placenta are the most frequent and most often clinically significant. The most common agents of these infections are gram negative bacilli, organisms ordinarily regarded as of low virulence, but capable of causing serious difficulty for the fetus and the newborn infant. The spectrum of morbidity and mortality of placental infection ranges from septic abortion to neonatal death. The relationship of amniotic infection to cerebral palsy and neurologic, sensory, and behavioral deficits in later childhood has only recently been appreciated, and deserves intensive study.

Placental infection most often follows an ascending route. Organisms that are usually the common residents of the mother's vagina and cervix ascend the birth canal and pass transmembranously to damage the decidua, membranes, and fetus. It must be

pointed out that the placenta may also be infected via the maternal circulation as in septicemia, and probably transtubally as well. At present little is known about the conditions necessary for invasion of the placenta by organisms. Certain factors associated with an increased risk of infection include premature and prolonged rupture of the membranes, prolonged labor, twin births, placenta previa, and instrumentation of the cervix or vagina. Infection may also pass to the placenta and fetus through intact membranes.

Viral agents infect the placenta with devastating effects. Our present understanding is that the virus reaches the fetus by hematogenous dissemination, transversing the placental villi and producing small scattered lesions requiring microscopic identification. Here, gross examination of the placenta may not be as helpful as a good maternal history. In contrast to maternal bacterial infections, which are usually silent, viral infections involving the placenta are usually associated with clinical illness in the mother.

The spectrum of viral illness is broad, and these agents may be abortigenic or teratogenic. The effects on the fetus are determined by the stage of fetal development at the time of maternal viremia. To illustrate, infection by rubella early in pregnancy often results in a well known complex of congenital malformations—the Gregg-Swan syndrome. Since the extensive rubella epidemic of 1964 we have appreciated that low birth weight, thrombocytopenia, hepatosplenomegaly, and bone lesions may represent late and active rubella infection, and that these infants may carry the virus at birth.

Twin placentas

Examination of placentas of twin births provides useful information for the medical record at little expense. In cases of identical (monozygous) twins such data are of more than academic value as organ transplantation advances, since transplants between monozygous twins are far more successful than other transplants. The clinician will also be alerted to the possibility of the transfusion syndrome, and may bear in mind that mirror-image organ reversal, absent umbilical artery, and congenital malformations are more common in identical twins.

There are two basic groups of twin placentas, those with a single chorionic membrane (monochorionic) and those with two separate chorions (dichorionic).^{7,8} Twin placentas in the monochorionic category are invariably fused, and the infants are identical twins (monozygous). Twin placentas in the dichorionic group may be either fused or separate. Those infants having dichorionic fused placentas may be either identical (monozygous) or fraternal (dizygous), and there is no way in which placental examination can differentiate.

The dividing membrane is the key to the examination of twin placentas. The dividing membrane is the

area of membrane that separates the two fetal cavities, and usually it runs across the middle of the fused placenta. In monochorionic twins (one chorion covering two amnions) the dividing membrane consists of two amniotic layers which are translucent and separate with ease from the placental surface. In dichorionic twins, which are of necessity diamniotic, the dividing membrane consists of four layers — two amnions and two chorions. Here it is opaque and thicker, and will not separate from the placental surface without disrupting it.

The transfusion syndrome

The transfusion syndrome is a major cause of prematurity, stillbirth, and mortality in monochorionic twins. The placenta of the monochorionic twin is of special interest because it almost always contains vascular anastomoses between placental vessels of the fetuses. These vascular communications, established early in life by random growth processes, may be from artery to artery, vein to vein, or artery to vein. Vascular anastomoses may have significant physiologic effects upon the fetuses, and when uncompensated by an equal and opposite shunt may account for what is called the transfusion syndrome.⁹

Mechanically, vascular anastomoses permit the transfer of high pressure arterial blood from one twin (donor) to the venous system of the other twin (recipient). The donor twin becomes hypovolemic, dehydrated, malnourished and "shocky." His organs are small in size and weight and the amniotic fluid is decreased (oligohydramnios). The recipient twin becomes hypervolemic, edematous, and plethoric. His organs are large and heavy, and he may be in congestive failure and have an excess of amniotic fluid (hydramnios). The placentas may appear different, one being extremely congested and other rather pale and anemic. Under the above circumstances the twins will look anything but identical, although they are in fact monozygous. The thin translucent dividing membrane composed of two amnions is diagnostic. Vascular anastomoses will almost always be demonstrable by dye-injection studies. Extreme examples of transfusion may be self-corrective in utero with the death of one twin which becomes a fetus papyraceus. The presence of such a fetus attached to the placenta is presumptive evidence that the twins are monozygotic.

METHOD OF EXAMINATION

Placentas provide the most useful information when viewed in the fresh, unfixed state. Fixation in formalin prior to examination causes loss of helpful natural color, and it becomes difficult to judge dividing membranes of twin placentas. The immersion of large organs in formalin actually provides poor fixation because of the thickness of tissue.

Following examination in the delivery room by the clinician, the placenta may be kept for as long as

three days in the ice box. The best way to do this is to place it in a large ice cream carton which is clearly labeled with the mother's identifying information. In this way the placenta is kept available for review, and blocks of tissue may be taken for microscopic examination by the hospital pathologist. For better communication, a simple standard form on which pertinent data are recorded may be wrapped around the carton. Such a form should contain the estimated age of the gestation, weight of infant, and complications and circumstances necessitating the examination. Finally, a certain amount of familiarity and experience is necessary for placental examination, but these are easily acquired by practice and reference to one of several excellent reviews on the anatomic pathology of the placenta.^{7, 10}

CONCLUSION

Useful information is derived from placental examination at all perinatal autopsies, multiple births,

and complicated deliveries. Most important, clinical suspicion by either the pediatrician or obstetrician is reason enough for the examination. It should be the constant objective of all concerned to reduce perinatal mobility and mortality in the hospital.

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Women, in all civilized nations, have the management of domestic affairs, and it is very proper they should, as Nature has made them less fit for the more active and laborious employments. This indulgence, however, is generally carried too far; and females, instead of being benefited by it, are greatly injured, from the want of exercise and free air. To be satisfied of this, one need only compare the fresh and ruddy looks of a milk-maid with the pale complexion of those females whose whole time is spent within doors. Nature has made an evident distinction between the male and female, with regard to bodily strength and vigour, yet she certainly never meant, either that the one should be always without, or the other always within doors. —William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 355.

The Geriatric Patient and the Nursing Home

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AN increasing number of young and middle-aged adults are finding that they have a new and unfamiliar responsibility—the participation in devising adequate living plans for an older person. One of the most difficult tasks is the selection of a nursing home for a chronically ill person. In approaching such a complex task, it is essential not only to have guidelines and measures for the services in a nursing home, but also to evaluate the patient so that the environment and activities selected are best suited to meet his needs.

In evaluating the needs of the patient, it is often easier to judge the extent of those overt incapacities which pertain to daily personal care; for instance, the inability of a person to bathe and dress without assistance, and the physical and mental incapacity to be responsible for mobility, either walking or utilizing private or public conveyances.

Other changes occur in the later years which are not as easily recognized and yet are very important to the total functioning of the individual and for life satisfactions. For example, there are declines in his capacity to taste, to smell, to feel pain and temperature changes, to hear, and to see. The process of senescence, or so-called normal aging, brings with it a decline in the ability to hear certain high frequency sounds and to separate from a number of sounds those which are most meaningful. It also affects the speed in which a person can adjust when moving from a dark to a lighted room or vice versa. Also, the elderly person requires greater illumination to do work and to see such things as utensils and food. Such changes require that the environment be structured to meet the needs of the elderly. This environment is quite different from that which is best suited for the health and adjustment of a younger person. The age changes mentioned above will appear as relevant to the criteria utilized in selecting a nursing home.

LONG-TERM VERSUS EXTENDED CARE

Unfortunately, what is legally considered a nursing home may differ considerably from one locality to another. Another dimension was added to the long-term health care of the elderly when the term "extended care" was introduced into the field by Public Law 89-97 amendments to the Social Security Act of 1965. Extended care in the extended care facility conceived under Medicare legislation is intended to be an extension of hospital care. It is meant to be an active treatment program aimed at restoring the patient to an acceptable level of functioning within the community.

The term "extended care" has been but should not be confused with long-term care or continuing care. The latter involves patients who are unable to remain at home because they cannot physically or mentally, either independently or with assistance, maintain a satisfactory adjustment. Generally speaking, such long-term facilities are classified as nursing homes, but there are states such as New York that permit one facility to offer both such services; that is, nursing home care and extended care. Obviously, extended care is oriented towards rehabilitation, while nursing home care is geared to maintaining a life at as satisfactory a level as is possible. There would be a financial differentiation, and this is particularly important as extended care can be financed by Medicare. The situation is clearly confused in that it is often difficult to distinguish between the patient's need for extended care and for nursing home care. In determining eligibility, one of the primary determinants is the prediction of the patient's ability to regain capacity to care for himself. Once it is determined that the patient will require chronic or long-term institutional care, he is probably no longer eligible for Medicare benefits even though his health status may be such that he requires constant attention.

Long-term care is often provided in proprietary nursing homes, in a few publicly sponsored chronic disease hospitals or homes for the aged and infirm, and in state mental institutions. In selecting a long-

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erm care facility, the input of a knowledgeable physician is of value, but even his advice is of limited use because of the complexity and the fluidity of long-term facilities and programs. The physician, of course, will be interested in maintaining good communication with the nursing home administrator and with the skilled health personnel on the staff. The physician is particularly interested in making certain that the records are such that he can evaluate the health status of the patient and that his prescribed medications and activity programs are accurately followed.

THE OLDER POPULATION

In the United States there are approximately 20,000,000 men and women aged 65 and over. The first counts of the aging groups of the American people based on the 1970 census show that the older population—that is, those aged 65 years and over—in a ten-year period grew faster than the remaining population—an increase of 21.1 percent versus 12.5 percent. Of even greater importance to the nursing home is the change in those aged 65 and over. This truly aged group increased 37.1 percent.¹ It does appear that at least one in every 11 persons in the United States is aged 65 or over. From state to state there is considerable variation in the percentage of people in this age bracket. North Carolina ranks forty-first, with only 8.2 percent. Even this, however, is an increase from 1960 when only 6.9 percent of North Carolinians were over 65 years of age. Florida ranks first with 14.5 percent.² In 1900, 4.1 percent of the population of the United States were in the older age group; by 1965 this figure had increased to 9.4 percent. While the percentage has doubled, the actual number of aged persons has increased six to seven-fold; from 3,000,000 to more than 20,000,000.

At the turn of the century the difference in the number of elderly men and women was not remarkable. Of particular importance to our society is the growing predominance of women. Even though there are more boy babies than girl babies born, the longer life expectancy for females results in a gradual shift in percentages, so that after the age of 30 there are 105.5 females for every 100 males in the total population. In the population aged 65 years and over, there are 138.5 females per 100 males; and after age 75 the ratio moves to 156.2 females to every 100 males. The problem of the increasing number of widows and single elderly women is becoming a very serious problem, as it is becoming more necessary to find avenues of social participation which are rewarding to single elderly women as opposed to married elderly men and women.¹

Although age 65 is often used as the date for enforced retirement and for such governmental programs as social security, it is very misleading to assume that most individuals at age 65 encounter a major change in their physical health and mental ef-

ficiency. Generally speaking, people between the ages of 65 and 75 are healthy and capable of living very rewarding lives. From a health statistical viewpoint, age 75 is a more important date, because life expectancy at age 75 is about nine years, and it is then that the health problems increase in significance.

Those 75 years of age or older are restricted in their activities because of illness about 12 days more per year than those aged 65 to 74. The 75-plus person is in bed at least eight days more per year, and in general activity is limited as the result of chronic conditions. Of those persons 75 and over, 23.7 percent are unable to carry on major activity as opposed to 9.7 percent of those between 65 and 74 years of age. Individuals of 75 or over are often referred to as aged persons. Aged persons so defined comprise 8.1 percent of the institutionalized, as opposed to 2 percent of those between 65 to 74 years of age.

Physical and mental health

In the older population the close relationship between physical and psychological status is particularly apparent. Chronic illnesses of all sorts are prevalent among the aged, and these conditions advance steadily with age. In earlier adulthood—that is, up to 45 years of age—45.3 percent of persons have one or more chronic conditions which are annoying to them. Fortunately these conditions produce limitations of major activity in only 7.4 percent. Between the ages of 45 and 64 chronic conditions are present in 61.3 percent, and limitations of activity in 18.3 percent. After age 65, chronic disorders advance to 78.7 percent and disability to 45.1 percent. Those who are bedfast comprise 2.3 percent of the aged, and 6.1 percent are confined to their rooms or living quarters. Of the remaining, 86.2 percent can go outdoors without difficulty, while 5.4 percent must exert considerable effort in order to venture out from their confined environment.³ Obviously such confined persons are in danger of isolation and do have difficulty maintaining social activity, intellectual stimulation, and opportunities for learning. Such losses undoubtedly account in large measure for their decline in mental capacities. The decline in intellectual and mental abilities has a clear relationship in approximately 80 percent of the cases studied.⁴

A minority group?

Social and behavioral scientists define minority groups in a number of ways. It is possible to identify a minority group as a collection of individuals who can be identified by specific characteristics, and who do not as individuals or a group, either voluntarily or by prohibition of the majority, participate in all the life experiences of the majority. Consequently, minority groups do not share all life experiences equally, nor do they have the same responsibilities for certain required life experiences. Some minority groups can therefore be in an advantageous position,

such as nobility, while others can be very deprived in relationship to the rest of society.

There are some minority groups that elect to bypass opportunities or to reject responsibilities offered by the majority in order to maintain their own value systems. Minority groups can exist in a relatively contented fashion when the advantages offered them by their own group satisfactorily meet their needs, or, if they so elect, when the opportunities of the majority are also open to them. If one accepts the views which have been expressed, then it is evident that the elderly—particularly the retired elderly person—is a member of a minority group. Furthermore, if one looks closely at the opportunities that exist for most elderly people, they are certainly a deprived minority who do not share equally in the affluent society which they have helped to create.

There is no doubt that compulsory retirement and enforced retirement because of poor health account for many people leaving the labor force. However, in those elderly persons who are compelled to retire because of employer policy, there is no doubt that a significantly high percentage would be capable of continuing to function for at least five to ten years past the usual age of retirement. Compulsory retirement plans are primarily associated with economic conditions and the condition of the labor market rather than with the individual's ability to perform in some financially rewarding capacity.

A 1970 issue of a weekly news magazine repeatedly stressed the fact that elderly people are the victims of widespread prejudice and bias.⁵ Discrimination takes all forms, but one of the most difficult problems is the fact that elderly people are ridiculed when they continue to strive for love and affection, seek pleasure, and wish to maintain their self-esteem. The existence of this widespread prejudice is the result of early acquired attitudes towards the aged, and can be attributed to a number of factors including socioeconomic changes. Unfortunately, these prejudices are found not only in the lay public, but also in professional and volunteer workers, who are the products of the society and therefore bring to their relationships with elderly people the predetermined attitudes and patterns of reacting which are common in all of society. A British scientist noting the extent of this prejudice has referred to it as gerontophobia. If the elderly persons are to receive the care which they need and deserve, it is important that these prejudices be eliminated and the previous contributions and current values and needs of these people be recognized.

The need for self-esteem

Self-esteem is a composite of innumerable self-rating scales that are socially influenced, but in a large measure are individually constructed, measured, and valued by the individual. Two components of self-esteem which are often extremely important to

the elderly person are his measure of whether his life has any value to himself and to others, and a more subtle but extremely important measure of his capacity to deal successfully with physical disease and trauma. Some individuals believe that they have provided resources for themselves that make it possible for them to successfully survive any period of illness. However, there are others who have not provided this reserve strength and are completely at the mercy of others to take care of them during an illness. Some individuals can control this situation by economic resources, while others must be highly dependent upon being liked, respected, and considered sufficiently worthwhile by others that they will be adequately cared for during their illness. Chronic disability plays an important role in both of these measures of self-esteem, as a disabled person may find it very difficult to find ways to feel that his life is meaningful and justified, and in addition may deplete his resources so that his comfort and survival are tied to the goodwill of others.

THE NURSING HOME

One of the most serious drawbacks in either a proprietary or public nursing home is remoteness of the final authority. The owner of a proprietary nursing home should be continually involved with the services, as it is as easy to assume that the home is functioning very effectively because the purchasing systems, the accounting methods, and the like are obviously efficient. If the final authority is not present on the premises, it is important to make certain that the administrator does have the capacity to make judgments regarding policy changes in patient care. In recent years there have been increasing efforts to train administrative and service personnel for nursing homes. Certainly the administrator profits by such training and by learning opportunities that are periodically offered by universities and other service-related agencies.

There can be developed no firm guidelines as to the urban, rural, or semi-rural location of a nursing home. Regardless of where the home is located, there should be sufficient stimuli in the environment to keep the residents alert and interested. An elderly person can be very lonely regardless of where the home is located. Many approaches can be utilized to maximize the usefulness of stimuli from the environment. For example, in an air-conditioned nursing home, externally located pickups can transmit into the dining and living areas the familiar early morning songs of birds. Such devices can be extended to a bird identification by song or bird-watching activity which can add an important dimension to living.

The nursing home cannot expect to function effectively as an isolated unit. It must have intimate and continuing relationships with community activities and resources. The administrator and personnel of the nursing home must have a good working

relationship with church groups and any other public or private groups or agencies that can be of value to the residents of the home. Periodic visits and projects by such organizations as Girl Scouts have proven to be of enormous value to nursing homes.

Nursing

The personnel who come in day-to-day contact with the residents of a nursing home include those associated with the so-called nursing service, the food service, and other supporting service people. Employees associated with the nursing service will include registered nurses, practical nurses, nursing aides, and attendants. All these individuals offer what is called nursing care. Such care involves not merely the administration of drugs and the application of treatment techniques but an extremely demanding relationship with elderly people that is necessary in order to make the older resident feel that he is understood, that his needs are appreciated, and that his health and well-being are important to those who come in contact with him. A chronically ill elderly person is particularly aware of his high dependence upon nursing personnel, as he can easily be deprived of many satisfactions if they become annoyed or angry with him. Consequently, some patients try to avoid being nuisances so that, in the event they are in desperate need, nursing personnel will adequately respond. Often an older person will feel that he is not being properly cared for, but is afraid to express his displeasure because he may antagonize the very ones who are responsible for his care.

Recent studies in Great Britain indicate that there is a serious misconception regarding nursing by many nursing home administrators. These studies indicate that nursing home administrators believe that geriatric patients require less nursing skill and fewer nurses than do acute medical and surgical patients. Detailed records and observations indicate that this is not true, particularly in those facilities which have admitted or acquired or accumulated a large number of seriously ill people. The range of diagnoses and treatment regimens is wide, requiring great knowledge and skill, and many of the chronic illnesses are complicated by mental confusion and the burden of fecal and urinary incontinence. Dr. Robin E. Irvien and Miss B. J. Smith reported to the British Geriatric Society in London (Spring, 1970) that many geriatric units require a very high nurse-patient ratio and that it appears that a ratio of one-to-one is preferable.

Serious illness

Although it is extremely important that the resident of a nursing home have the services of the physician when required, it is quite obvious that many of the complicated diagnostic procedures cannot possibly be carried out within a nursing home. Therefore, transportation should be readily available for the patient to be carried to the medical facility

where diagnostic procedures can be carried out. Transportation should also be readily available if transfer to a hospital is required.

Food service

Those responsible for the preparation and the serving of food to residents of nursing homes must be aware of the physiological and pathological changes that accompany old age. The declines in ability to taste and to smell are directly relevant to the dietary service. In addition, the normal changes of aging require better lighting in order to adequately see certain objects. The loss of teeth often makes it necessary for the dietician to make foods attractive and distinctive without having them appear as a pureed, undifferentiated mass.

The weak and unsteady hands of many elderly persons make it embarrassing to attempt to cut food or to properly prepare food such as the buttering of bread and biscuits. Assistance in the preparation of food must be done in an unobtrusive, helpful manner that is not embarrassing to the patient. The plates must be deep, and some nursing homes prefer to use compartmented plates. Cups and glasses must be large enough but not heavy. The silverware, too, must be efficient but lightweight. The process of eating is often a social event, and therefore it is essential that the persons can sit comfortably, eat at a reasonable pace, and have an opportunity for conversation after the meal. The chairs should be comfortable and the tables large enough to permit adequate distances between the diners. It is important that the consumption of food be observed, so that adequate intake is assured without pushing the elderly person as some people push children to eat all that is placed before them.

There is no doubt that there is a continuing shortage of well trained and capable personnel in these service fields. Food service is no exception, and it is unfortunate that many nursing homes are aware of deficiencies within their food services but cannot find capable personnel even though they are willing to pay adequately. Consequently, it is often necessary for family and friends to assist whenever possible and when it is required to make certain that food intake is pleasant and adequate.

A number of investigators have found that the addition of beer and wine to the routine of a nursing home or a chronic care unit has proven to be extremely effective in improving patient morale. It is known that alcohol is a sedative, but the availability and the addition of beer and wine have increased conversation and social interaction. Certainly people who have been accustomed to such beverages throughout their life span should not be denied the opportunity to enjoy them in old age. Alcoholism or excessive alcohol intake can be a problem at any age, but fortunately consumption can be very carefully controlled in most nursing homes.

Activities

Visits to randomly selected nursing homes reveal that a large number of patients appear to be withdrawn, unsociable, and virtually unreachable. Purposeful mass activity has been found to be a very useful device in breaking down this wall separating the elderly person from the world.⁶

Physical environment

Room arrangement, a roommate, ease of movement in rooms and to recreational areas are all of utmost importance. The nursing home should be in the true sense a "home," offering security, comfort, and stimulation. Residents should participate fully in planning and carrying out social activities and have an opportunity to make suggestions regarding not only the services rendered but the appearance and structure of a physical environment. Lighting is of particular import. Night lights are necessary in many locations, as elderly people find it particularly difficult to move around in the dark and cannot move from a well lighted room to a dark room without a lengthy delay in visual accommodation. With advancing age there appears to be a rather capricious intolerance to changes in temperature. It is important that temperature of the building be held as constant as possible, so that the variation in how an elderly person responds to the temperature can be individualized and handled by the addition of wraps or a reduction in the number of clothes. The floor of a nursing home should be level, avoiding steps, even small ones, up or down. For example, bathroom floors should not be raised, requiring an older person to step up or down. Handrails for assistance should be adjacent to commodes and bathtubs.

MENTAL PATIENTS AND NURSING HOMES

In recent years the proportion of older persons in mental hospitals has increased steadily. On any given day, at least one of three beds in a public mental hospital is occupied by a person 65 years of age or older. Approximately one third to one half of the persons in the 65 or older age group in public mental hospitals are admitted as younger patients. However, the remaining one half or more were admitted at age 65 or older. Eighty-three percent of first admission older patients are diagnosed as having senile brain disease, arteriosclerotic brain damage, or both. The reliability of these clinical diagnoses has been questioned and has been under study for many years. The coexistence of senile brain disease and arteriosclerotic brain disease is not unusual. On the basis of autopsy material it appears that 45 percent of elderly patients with organic brain disease are primarily ill because of cerebral arteriosclerosis, 35 percent are suffering primarily from senile brain changes, and 20 percent show evidence of both pathological processes.⁷

In recent years, nursing homes have become a

major resource for the placement of aged state mental hospital patients. Questions have been raised as to whether these homes are appropriate placement for this type of patient. Investigators at the Boston State Hospital conducted a one year controlled study of 16 nursing homes containing approximately 14,000 patients. They found institutional deprivation to be a common problem and that such deprivation could be physical, intellectual, or spiritual. Deprivation in nursing homes was found to be particularly related to (1) lack of stimulation; (2) lack of adequate walking space inside and outside the homes; (3) lack of recreational and occupational therapy; (4) lack of space for group socialization and activities; (5) lack of a common dining room, so that patients have to eat off of trays in their rooms; (6) absence of volunteer workers from the community; (7) separation of patients on different floors, reducing the possibility of interaction; and (8) minimal socialization between male and female patients. This study indicated that regressive behavior can be the result of deprivation rather than organic changes. Regressive behavior is manifested by withdrawal, seclusiveness, uncooperativeness, incontinence, refusal to eat, loss of interest in personal hygiene, loss of ability to perform self-care functions, and grossly inappropriate social behavior.

There are some investigators who believe that the nursing supervisor is the key staff member in a nursing home. Although the nursing supervisor is selected by the administrator and owner, of greater importance seems to be the type of person she is. They believe that at least three types of nursing supervisors can be identified. The *permissive* supervisor leads to an indifferent staff and anxious patients. The *dominant* supervisor, although running a home that is a model of efficiency and neatness, lowers the self-esteem of the staff and is likely to disregard patients' emotional needs. The investigators feel that a nursing supervisor who shares control of responsibility and plans with the staff is much more likely to contribute to the effectiveness of the home program. They caution that although the nursing supervisor who has produced the best climate for the patient is desirable, he or she may not be appreciated because some people prefer to have cleanliness and neatness take a higher priority over meeting emotional needs.

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Visual Acuity After Surgery for Retinal Detachment

Harold N. Jacklin, M.D.

NEW instruments, surgical techniques, and retinal subspecialty training have increased the rate of anatomic replacement of the detached retina. Only a few studies are available concerning postoperative visual function following the introduction of these new advances.¹⁻⁴ Varied methods of patient selection, etiology, and training of the surgeons make comparative analysis of the previous series difficult. The following study was performed to evaluate one parameter of postoperative visual function—visual acuity—in a selected group of patients operated on and followed up by the author.

MATERIALS AND METHODS

Eighty consecutive patients ranging in age from 20 to 78 years were included in this study. Each patient had a nontraumatic rhegmatogenous retinal detachment that had not been operated on previously. Following detailed preoperative evaluation, a scleral buckling procedure was performed with lamellar scleral dissection, diathermy, or cryoapplication, and drainage of subretinal fluid where indicated. Solid silicone or absorbable gelatin implants were utilized to create the scleral indentation.

Reattachment was achieved in 67 of the 80 pa-

tients with a single procedure, and 5 more with two or more procedures (Table 1). Thus 72 of 80, or 90 per cent, were successful in obtaining reattachment. Each patient was carefully followed from 6 to 24 months.

Functional results in this paper are confined to the 67 patients, 45 phakic and 22 aphakic, with a successful reattachment following a single operative procedure. Each patient underwent multiple cycloplegic and manifest refractions, visual acuity testing, and complete postoperative fundus examinations during the observation period.

Table 1
Anatomic Results in 80 Cases of Retinal Detachment

Result	No. Cases
Retina reattached	67
Single procedure	5
Multiple procedures	8
Retina failure	80

RESULTS

Refractive changes affecting visual acuity occurred in 70 percent of the patients following surgical treatment of retinal detachment. These changes were usually present at the first postoperative refraction two weeks following operation and persisted over the observation period. Refractive changes became stabilized by three months, so that new lenses could be prescribed. Refractive changes were minimal when no encircling band was used in the operative pro-

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Reprint requests to 1014 North Elm Street, Greensboro, N. C. 27401.

Table 2
Preoperative and Postoperative Visual Acuity

Vision	Preoperative (No. Cases)	Postoperative* (No. Cases)
< 20/200	38	3
20/200	7	11
20/100		6
20/80		5
20/70		3
20/60		2
20/50	2	5
20/40	1	8
20/30	4	8
20/25	4	5
20/20	7	11

* Six months

cedure. When a band was used, a significant increase in myopia or decrease in hyperopia occurred. Visual acuity improved with time even though the refractive error remained unchanged.

A comparison of preoperative and postoperative visual acuity six months following the operation is shown in Table 2. Visual acuity had improved in all but two patients. A macular pucker occurred in one case, and no definite pathologic change could be found in the other case to account for the poor vision. In some cases, preoperative factors, such as cataracts, macular degeneration, or vitreous hemorrhage, influenced the postoperative vision. In 56 percent of the patients, visual acuity was less than 20/200 preoperatively, but in less than 1 percent postoperatively. In 55 percent, the postoperative vision was 20/50 or better.

The status of the macular area influenced the visual acuity. When the retinal detachment was detected early and prior to macular detachment, postoperative vision was excellent. Unfortunately, in 43 cases macular detachment had occurred and preoperative vision was poor, usually 20/200 or less. It was this sudden loss of central vision that brought attention to the detachment process. The duration of the macular detachment also determined the degree of visual recovery. Despite macular detachment, visual acuity was recovered dramatically following surgery (Table 3). Thirty-seven percent achieved 20/50 or better.

The type of operation performed did not correlate with postoperative visual acuity. The localized detachment required a less extensive procedure and the patient had better postoperative acuity. More extensive detachments required more complex procedures. The least traumatic procedure was selected without increasing the risk of operative failure.

COMMENT

It is extremely difficult to assess preoperatively the degree of functional recovery following retinal reattachment. There is no available test to determine the ability of the retina to recover its functional capacity. Schepens and others,^{5,6} however, have discussed the prognostic factors as found during the preoperative evaluation of the patient. All retinal surgeons have seen a favorable outlook fade into a

Table 3
Postoperative Vision With Macular Detachment

Vision	Number Cases
< 20/200	2
20/200	1
20/100	5
20/80	5
20/70	2
20/60	2
20/50	5
20/40	5
20/30	2
20/25	2
20/20	2
	43

disappointing functional result, and a rather complex case with a poor prognosis eventuate in an unexpected return of vision. While the patient may not achieve enough vision to read the eye chart, the visual recovery, particularly in a unilateral case, may enable the patient to perform many valuable and useful tasks. Retinal surgery should be attempted in most cases of retinal detachment.

In a high percentage of patients in the present series surgical reattachment was achieved with subsequent improvement in visual acuity. The results were better when the detachment was detected early and had not spread into the macular area. All patients complaining of light flashes, vitreous floaters, and loss of central or peripheral vision should have a detailed examination of the fundus with indirect ophthalmoscopy and scleral depression.

In a very small percentage of patients, successful anatomic reattachment may be followed by deterioration of visual acuity due to progressive central retinal artery occlusion, preretinal organization and macular pucker or optic atrophy.⁷⁻¹⁰

SUMMARY

Visual acuity was improved following successful retinal detachment surgery. Fifty-five percent achieved an acuity of 20/50 or better six months following surgery. Early detection and surgery before macular detachment occurs increased the chances for excellent postoperative vision.

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Editorials

THE 1972 MIDWINTER EXECUTIVE COUNCIL MEETING

On Sunday, January 30, 1972 the Executive Council met at the Carolina Hotel in Pinehurst for a full day's deliberation of current Society problems. The hotel itself managed to get everyone's attention as an opener; the homey atmosphere so familiar to several generations of Pinehurst visitors has been replaced by Las Vegas style chrome and bold colors, with more changes in the offing. The only landmarks still readily visible are Razook's and the craft shop, so be prepared for a few moment's disorientation when next you visit the hotel.

Dr. Tilghman Herring's financial report reflected careful management of the Society's funds, and it seems that we will meet our projected financial commitments in connection with construction of the Headquarters building, aided by satisfactory rental income from the upper floor. A second field representative, previously authorized but not funded, can now be funded and a search will be started for a good candidate.

The Council, after considerable discussion, approved continuing study by a special committee of what the Society should do about peer review, in light of the imminent passage of Senator Bennett's amendment to HR-1 requiring such review; the Bennett amendment has widespread bipartisan support in Congress. An organization separate from the Society will be needed to qualify for such peer review activities, and in all likelihood the existing medical foundation will not be suitable, which means that a lot of work lies ahead in the planning of an entirely new group activity. The way the drafted legislation reads, a statewide organization could rely entirely on professional reviewers, but a system in which there were individual local professional groups would be subject to review at the state level by a body composed of professionals and "consumers." Council members were of the opinion that the membership needs to know a great deal more about these problems than it does at present, despite the large amount of material published already in such places as the *AMA News*, *JAMA*, and *Medical Economics*.

The last House of Delegates instructed the Council to look into restructuring the Districts to give more equitable representation based on the number of members within a District. A variety of plans—six

in all—were presented for discussion. Dr. William Romm, Second Vice-President, from Moyock in the First District pointed out the very real problems posed by the geography of this large sprawling state as illustrated in the various plans. His area has a small number of members, but the District enjoys good relationships among them, with good fellowship at meetings, and has maintained a North Carolina orientation in medicine despite natural affinities to southeastern Virginia. The new plans would make the District so large that much of their present esprit might be lost, as members find it difficult to travel 200 miles or more to "local" meetings. Dr. Romm's feeling was that there is adequate proportional representation in the House of Delegates already, which is where the real authority of the Society lies, and that geographic considerations deserve major emphasis in outlining the Districts. The Council will take up still more plans, with the suggestions of Dr. Romm and others in mind, at its May meeting before the delegates convene.

The Occupational Health and Safety Act of 1971 is a very strict and far-reaching piece of legislation, and full realization of its impact is only now getting to employers across the country. These businessmen are going to need a lot of help from our profession, and from allied activities, to satisfy the requirements of this law, which calls for such things as a trained first aid worker for every certain number of employees or in every so many rooms of specified size in a factory. The Guilford County Society, and the State Society's Committee on Occupational and Environmental Health, have been working with the Guilford Technical Institute to develop a program to train people for work in occupational health. This is in its early stages, but the Council endorsed continuing effort on the part of the Society to help in this field.

The Drug Abuse Program will soon have 75-100 men working statewide in the field, using federal and state funds. A survey of physicians in North Carolina shows that 20 percent are now seeing narcotics addicts, with 64 percent having to deal with some sort of drug dependence. There is a definite increase in abuse of hard narcotics, especially heroin.

There were a large number of items which might be classified as housekeeping: the Society is involved in all sorts of things that would probably never occur

to the average member, such as working with the Governor's office to organize a statewide conference on sports medicine, membership on the Governor's Committee on Community Medical Assistance, a joint conference committee on medical care, and so on. Mention of a few of these actions follows. The Council approved a diet manual developed by the North Carolina Dietetic Association for use in nursing homes and similar institutions. Support was voted for a Student American Medical Association program to permit exposure of medical students in the pre-clinical years to community medicine (MECO) before they make a choice of some type of specialty practice; this is to start in 1973. A resolution was

passed calling on the North Carolina Department of Social Services to put the patient's social security number on stamps issued for Medicaid service and drugs; this was intended to save the time of both the patients and the doctors which now goes into trying to find these numbers through various channels. The Council approved the establishment of a new specialty section on urology, at the request of the Carolina Urological Society.

It was dark and raining when most of the Council got up to come to work, and the same conditions prevailed when adjournment came. At least there were no temptations to enjoy a Sunday's leisure.

Program

Preliminary PROGRAM

**One Hundred Eighteenth Annual Session
The Medical Society of the State of North Carolina**

May 20-24, 1972

Headquarters: THE CAROLINA
Pinehurst, North Carolina

Saturday, May 20, 1972

10:00 a.m.—REGISTRATION opens — (West Lobby)

Members, Delegates, Officials, Auxiliary, Scientific and Technical Exhibitors and Guests will register in this area

Specialty Sessions

Saturday, May 20

PATHOLOGY

9:00 a.m. to 4:30 p.m. Azalea Room
Chairman: Bob B. Andrews, M.D., Lumberton

#

NEUROLOGY AND PSYCHIATRY

9:30 a.m. to 12:00 Noon Cardinal Ballroom
Chairman: Clifton L. Quinn, M.D., Raleigh

9:30 a.m.—Executive Committee Meeting (Coffee and Danish)

10:00 a.m.—PANEL: MARRIAGE AND DIVORCE COUNSELLING

William Eastman, Ed.D., Assistant Professor Marriage Counselling, UNC, Chapel Hill

James Earl Somers, M.D., Chapel Hill

Ethel M. Nash, M.A., Chapel Hill

11:30 a.m.—Question and Answer Session to

12:00 Noon

12:30 p.m.—DUTCH LUNCHEON and Business Meeting (Crystal Room — The Carolina)

#

ORTHOPAEDICS AND TRAUMATOLOGY

1:30 to 3:30 p.m. London Grill Room
Chairman: Walter S. Hunt, Jr., M.D., Raleigh

1:30 p.m.—Business Session and election of officers

2:00 p.m.—Presentation of problem cases—(traumatic and orthopaedic) (bring your X-rays)

3:30 p.m.—Adjourn

#

RADIOLOGY

2:00 p.m. Cardinal Ballroom
Chairman: Morris A. Jones, M.D., Durham

Sunday, May 21, 1972

10:00 a.m.—REGISTRATION opens — (West Lobby)

HOUSE OF DELEGATES

FIRST SESSION—(Cardinal Ballroom)
Sunday, May 21, 1972—2:00 p.m.

Memorial Services—In memory of those physicians who have died during the year

#

5:30 p.m.—SOCIAL HOUR—North Carolina Society of Internal Medicine (Corner Cottage—Living Room)

8:30 p.m.—North Carolina Society of Internal Medicine — Executive Council Meeting (Pine Room—The Carolina)

Monday, May 22, 1972

7:30 a.m.—Auxiliary Board of Directors Breakfast (Crystal Room)

8:30 a.m.—Registration opens—(West Lobby)

8:30 a.m.—EXHIBITS OPEN — Scientific and Technical (North Room and South Room)

Specialty Sessions

Monday, May 22

**OPHTHALMOLOGY AND
OTOLARYNGOLOGY**

8:30 a.m. to 10:45 a.m. Pine Room
Chairman: Thaddeus H. Pope, Jr., M.D., Durham

#

GENERAL PRACTICE OF MEDICINE

8:30 a.m. to 10:45 a.m. Holly Inn Ballroom
Chairman: George W. Brown, M.D., Hazelwood

#

PEDIATRICS

8:30 a.m. to 10:45 a.m. Cardinal Ballroom
Chairman: Robert E. Balsley, M.D., Reidsville

#

PUBLIC HEALTH AND EDUCATION

8:30 a.m. to 10:45 a.m. Holly Inn TV Lounge
Chairman: Benjamin M. Drake M.D., Gastonia

TWO ORDERS OF PRIORITY:
Medical Demand and Public Need
C. Arden Miller, M.D., Professor
Maternal and Child Health, UNC

* The Clinical Capsule will be 3-4 minute presentation of an instructive case. About two minutes will be allowed for discussion and questions concerning the case.

School of Public Health, Chapel Hill

10:30 a.m.—Business Session—election of Officers

#

DERMATOLOGY

8:45 a.m. to 10:45 a.m. Crystal Room
Chairman: Clayton E. Wheeler, Jr., M.D.

Chapel Hill

CLINICAL CAPSULE*

UNC Dermatology Resident

**WHITE LESIONS OF THE ORAL
MUCOSA**

Ernest J. Burkes, Jr., D.D.S., Chapel Hill

CLINICAL CAPSULE

UNC Dermatology Resident

EPIDERMOLYSIS BULLOSA

Robert A. Briggaman, M.D., Chapel Hill

CLINICAL CAPSULE

UNC Dermatology Resident

TESTS FOR LUPUS ERYTHEMATOSUS

Elliot M. Puritz, M.D., Chapel Hill

CLINICAL CAPSULE

UNC Dermatology Resident

METHOTREXATE AND PSORIASIS

John P. Tindall, M.D., Durham

CLINICAL CAPSULE

UNC Dermatology Resident

CLINICAL CAPSULE

UNC Dermatology Resident

BUSINESS MEETING: Presentation of New Chairman, David G. Welton, M.D.

Election of Officers for 1972-73

9:00 a.m.—NORTH CAROLINA BOARD OF MEDICAL EXAMINERS — Meet for Business and Hearings (Board Suite)

**POSTGRADUATE AND AUDIO-VISUAL
PROGRAM**

Monday, May 22, 1972 Azalea Room
John C. Grier, Jr., M.D., *Chairman*, Pinehurst

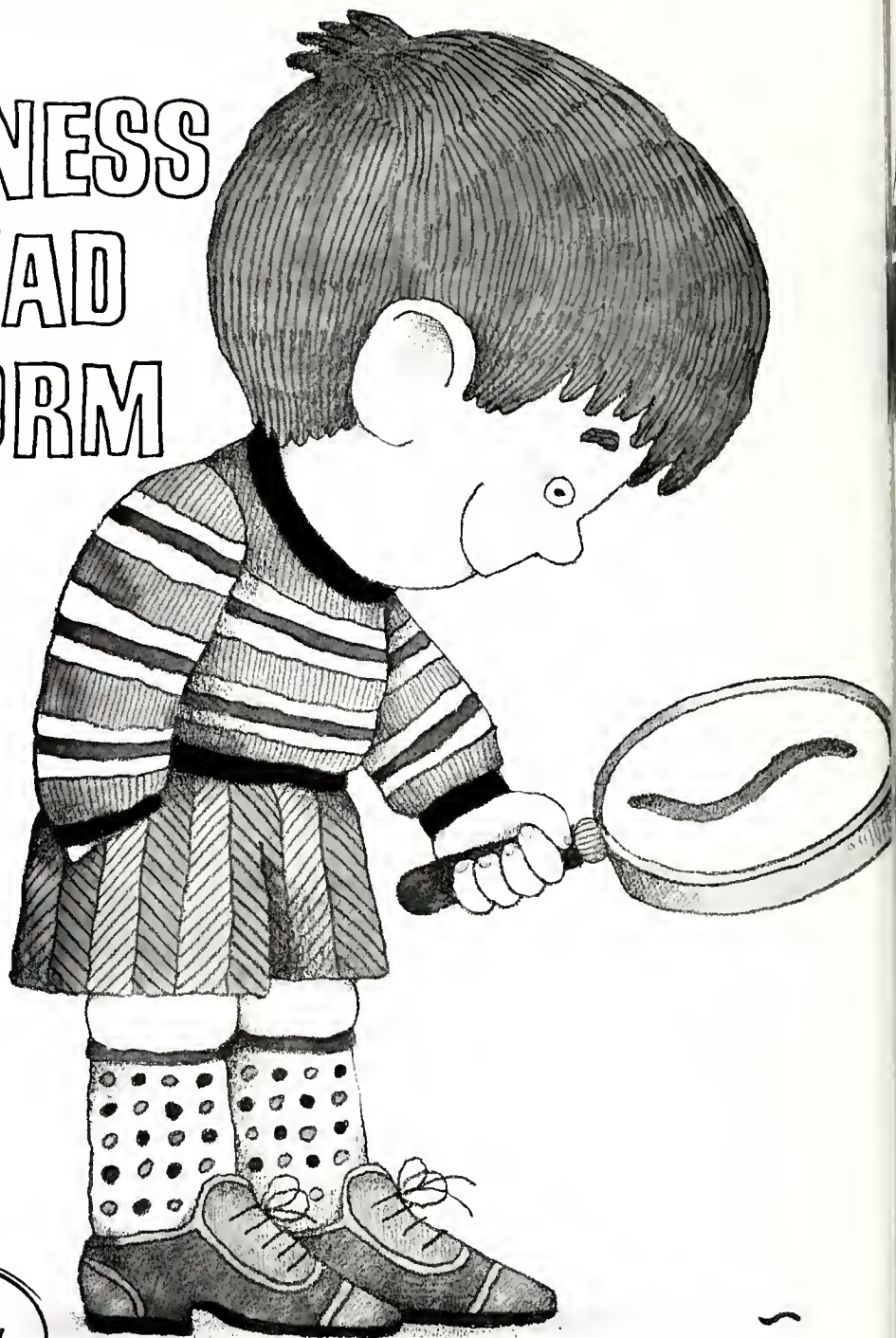
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9:00 a.m.-5:00 p.m.

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Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.

Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or mal-

nourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage;

hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live *Ascaris* in the mouth and nose. Hypersensitivity reactions include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.

Supplied: Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc. For more detailed information, consult your MSD representative or see the *Direction Circular*. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

Morning Session

Moderator: Thornton R. Cleek, M.D., Asheboro

9:00 a.m.—LIFE IN THE BALANCE

The use of cardiopulmonary resuscitation in the coronary care unit. How trained coronary care unit staff provide for prompt prevention, detection, and treatment of life-threatening arrhythmias, cardiogenic shock, and cardiac arrest

9:30 a.m.—HYPERTENSION: A MOSAIC IN MEDICINE

17 million Americans have hypertension. Summary of the diverse contemporary thinking in the clinical care of hypertensive patients

10:00 a.m.—CLINICAL APPLICATIONS OF LASERS

How lasers help in medical practice

10:25 a.m.—PATHOGENESIS OF URINARY INFECTION

Etiology of a prominent problem with many patients

10:45 a.m.—ACCURATE SILASTIC IMPLANTS

An interesting approach to help many patients

11:05 a.m.—MICRO-DERMAGRAFTING PROCEDURE

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FIRST GENERAL SESSION

Monday, May 22, 1972

(Cardinal Ballroom)

11:00 a.m.—CONVENE SESSION: Charles W. Styron, M.D., President

Invocation:

11:00 a.m.—SURGICAL TREATMENT OF RHEUMATOID ARTHRITIS

Arthur L. Brooks, M.D., Associate Professor Orthopaedic Surgery, Vanderbilt University, Nashville, Tennessee

11:30 a.m.—An Address: Charles A. Hoffman, M.D., President-Elect, American Medical Association, Huntington, W. Virginia

12:00 Noon—Announcements

ADJOURNMENT

12:30 p.m.—LUNCHEON — University of North Carolina Medical Alumni Association, Mr. Charles Powell, Director, Alumni Affairs, Chapel Hill (East End — Main Dining Dining Room—The Carolina)

2:00 p.m.—REFERENCE COMMITTEE Hearings

I—Cardinal Ballroom

II—Pine Room

III—Holly Inn Ballroom

POSTGRADUATE AND AUDIO-VISUAL PROGRAM

Monday, May 22, 1972

Azalea Room

Afternoon Session

John C. Grier, Jr., M.D., *Chairman*

Moderator: William W. Shingleton, M.D., Durham

2:00 p.m.—AMERICAN MEDICAL ASSOCIATION MEMBERSHIP

Slides and sound of what AMA membership can mean to you

2:20 p.m.—A PRESIDENTIAL CHALLENGE

President Richard Nixon's address to the meeting of the American Medical Association

2:50 p.m.—THE ROLE OF THE PRACTICING PHYSICIAN IN THE INVESTIGATION OF A SUDDEN, UNUSUAL, UNNATURAL, OR SUSPICIOUS DEATH

Slides and recording from the office of the North Carolina Chief Medical Examiner. Things which the practicing physician can do in certain cases of unusual death with an element of suspicion

3:30 p.m.—COURTROOM CONFRONTATION
The law in Medical Malpractice

#

3:00 p.m.—Auxiliary President-Elect's Party
to
(Poolside—The Carolina)

5:00 p.m.

6:00 p.m.—EXHIBITORS' SOCIAL HOUR —
to
(Scientific and Technical)

7:30 p.m. Presiding: Josephine E. Newell,
M.D., Chairman, Committee on
Exhibits

(Admission by appropriate badge)
(Cardinal Ballroom—The Carolina)

6:30 p.m.—SOCIAL HOUR—Medical College of
Virginia Alumni (Azalea Room
—The Carolina)

6:30 p.m.—SOCIAL HOUR — Duke Medical
Alumni (Poolside—The Carolina)

7:00 p.m.—MEDPAC DINNER

Thomas G. Thurston, M.D., pre-
siding (Main Dining Room—East
End)

7:30 p.m.—DINNER—Medical College of Vir-
ginia Alumni (London Grill —
The Carolina)

7:30 p.m.—DINNER—Duke Medical Alumni
(Crystal Room—The Carolina)

9:00 p.m.—DANCE — Cabaret style. General
dancing—all members, guests, ex-
hibitors welcomed (Cardinal Ball-
room—The Carolina)

10:00 p.m.—MEDPAC Board of Directors Meeting
(Pine Room—The Carolina)

#

Tuesday, May 23, 1972

7:30 a.m.—PRAYER BREAKFAST

Presiding: Jack W. Wilkerson, M.D.,
Chairman, Committee on Medi-
cine and Religion, Greenville
(Crystal Room—The Carolina)

8:30 a.m.—REGISTRATION opens — (West
Lobby)

8:30 a.m.—EXHIBITS OPEN — Scientific and
Technical (North Room and
South Room)

Specialty Sessions

Tuesday, May 23

INTERNAL MEDICINE

8:30 a.m. to 10:45 a.m. Cardinal Ballroom
Chairman: Thomas N. Massey, Jr., M.D., Charlotte

8:30 a.m.—PHYSICIANS' ASSISTANT IN IN-
TERNAL MEDICINE

E. Harvey Estes, Jr., M.D., Durham

8:45 a.m.—Actual Practicing Physician's Assistant

9:00 a.m.—TRAIN YOUR OWN ASSISTANT

John L. McCain, M.D., Wilson

Mrs. Pat Fulghum, Wilson

9:20 a.m.—AUTOMATED DATA ACQUI-
TION

Carl B. Lyle, Jr., M.D., Charlotte

9:45 a.m.—PANEL: NEW METHODS OF IM-
PROVING DELIVERY OF PA-
TIENT CARE

E. Harvey Estes, Jr., M.D.

John L. McCain, M.D.

Carl B. Lyle, Jr., M.D.

Mrs. Pat Fulghum

10:45 a.m.—Adjourn

#

SURGERY

8:30 a.m. to 10:45 a.m. Holly Inn Ballroom

Chairman: Donald Silver, M.D., Durham

MANAGEMENT AND PREVENTION OF PUL-
MONARY EMBOLISM

Stanley R. Mandel, M.D., Chapel Hill

CURRENT CONCEPTS IN THE MANAGEMENT
OF SHOCK

Robert W. Anderson, M.D., Durham

SURGICAL TRAINING OF MEDICAL STU-
DENTS BY THE PRACTICING SURGEON

Timothy C. Pennell, M.D., Winston-Salem

CURRENT CONCEPTS IN THE MANAGEMENT
OF ABDOMINAL AORTIC ANEURYSMS

Donald E. Mullen, M.D., Charlotte

THE AMBULATORY SURGICAL UNIT

James E. Davis, M.D., Durham

Business Session: Election of Officers for 1972-73

#

OBSTETRICS AND GYNECOLOGY

8:30 a.m. to 10:45 a.m. Holly Inn TV Lounge

Chairman: W. Joseph May, M.D., Winston-Salem

8:30 a.m.—ABORTION EXPERIENCE IN
NORTH CAROLINA—1971

W. Joseph May, M.D., Chairman,
Committee on Maternal Health,
Winston-Salem

8:45 a.m.—MEDICAL AND SURGICAL COM-
PLICATIONS FOLLOWING
THERAPEUTIC ABORTIONS
—A Review of Abortion Patients
in North Carolina Memorial Hos-
pital

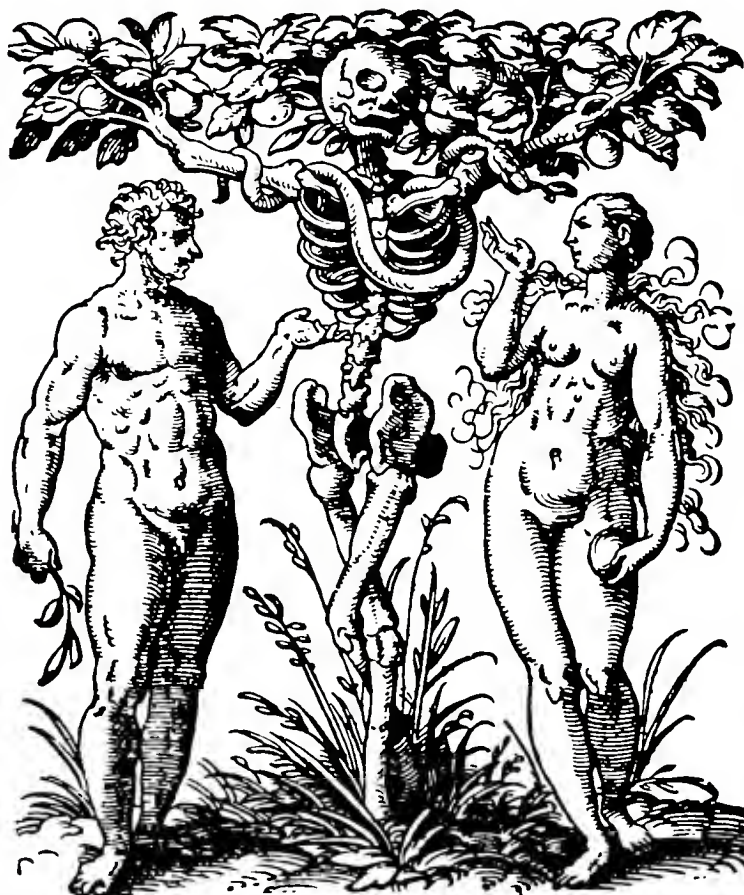
William E. Easterling, M.D., Asso-
ciate Professor, Department of
Obstetrics & Gynecology, UNC
School of Medicine, Chapel Hill

9:15 a.m.—THE PATIENT'S REACTION TO
HER THERAPEUTIC ABOR-
TION — A Follow-Up Study of
116 Post Abortion Patients

David A. Evans, M.D., Chief Resi-

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(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia. During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemo-

Trobicin®

sterile spectinomycin dihydrochloride
pentahydrate, Upjohn
single-dose intramuscular treatment

High cure rate: * 96% of 571 males, 95% of 294 females

Dosages, sites of infection, and criteria for diagnosis and cure are defined below.**) **

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of *Neisseria gonorrhoeae* in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

Data compiled from reports of 14 investigators. **) Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluable and were not included.

JA72 1848-6

globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: Vials, 2 and 4 grams—with ampoule of Bacteria-

satic Water for Injection with Benzyl Alcohol 0.9% w/v. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.

Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.

For additional product information, see your Upjohn representative or consult the package insert.

MED-8-1-S (LWB)

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

dent, Department of Obstetrics & Gynecology, Bowman Gray School of Medicine, Winston-Salem

9:30 a.m.—**MATERNAL MORTALITY IN NORTH CAROLINA—A Five Year Review from 1966 through 1970**

Stephen G. Anderson, M.D., Assistant Professor, Department of Obstetrics & Gynecology, Bowman Gray School of Medicine, Winston-Salem

9:45 a.m.—**HIGH RISK INDICATORS WITHIN MATERNAL CARE**

Theodore D. Scurletis, M.D., Director, Personal Health Division, North Carolina State Board of Health, Raleigh

10:15 a.m.—Panel Discussion of Presentations

10:30 a.m.—**BUSINESS SESSION** — Report of Nominating Committee for Chairman-Elect and Secretary of Section on Obstetrics and Gynecology, 1972-1973

10:45 a.m.—Adjournment of Meeting

#

ANESTHESIOLOGY

8:30 a.m. to 10:45 a.m. Pine Room
Chairman: Kenneth Sugioka, M.D., Chapel Hill

8:30 a.m.—Registration and Coffee

9:00 a.m.—**FETAL PERINATAL EFFECTS OF ANESTHETIC AGENTS**

John I. Fishburne, Jr., M.D., Assistant Professor, Department of Obstetrics and Gynecology and Anesthesiology, N. C. Memorial Hospital, Chapel Hill

9:30 a.m.—Question and Answer Session

9:45 a.m.—**TREATMENT OF THE DE-PRESSED NEWBORN**

Kenneth Levin, M.D., Assistant Professor of Anesthesiology (Pediatrics), N. C. Memorial Hospital, Chapel Hill

10:15 a.m.—Question and Answer Session

10:30 a.m.—Business Session—George A. Weimer, M.D., Greenville

#

POSTGRADUATE AND AUDIO-VISUAL PROGRAM

Tuesday, May 23, 1972 Azalea Room
John C. Grier, Jr., M.D., *Chairman*, Pinehurst

Morning Session

Moderator: Paul McBee Abernethy, M.D., Burlington

9:00 a.m.—**ALDOSTERONE: STORY OF A HORMONE**

Metabolism of salt and water, kinetics of edema. Pathophysiology of sodium retention. Implications of hormonally controlled electrolyte metabolism. The mysteries of aldosterone laid bare—its effect on high blood pressure, edema, and related diseases

9:35 a.m.—**GYNECOLOGIC LAPAROSCOPY**

Panoramic view of pelvic contents. Demonstration of proper technique for pelvic endoscopic examination. Cinematography of various gynecologic pathology

9:55 a.m.—**MEDICAL POTENTIALS OF LASERS**

10:20 a.m.—**PORTACAVAL SHUNT FOR PORTAL HYPERTENSION AND ESOPHAGEAL HEMORRHAGE**

End-to-side portacaval anastomoses. Case histories. Physical findings, laboratory data. Technic of splenoportography. Surgical procedure. Post-operative course

11:00 a.m.—**OPERATIVE CLINIC ON JAUNDICE**

Intravenous cholangiography. Laboratory findings. Surgical procedures. Clinical course

#

SECOND GENERAL SESSION

Tuesday, May 23, 1972

(Cardinal Ballroom)

11:00 a.m.—**CONVENE SESSION:** Kenneth E. Cosgrove, M.D., First Vice-President, Hendersonville, presiding

11:00 a.m.—Panel: **GENETIC COUNSELING**
to Incidence of Genetic Diseases

12:00 Noon Common modes of inheritance, with examples

Role of the practicing physician in Genetic Counseling

Types of patients appropriate for referral to counseling programs especially for antenatal diagnosis

MODERATOR: Carey H. Bostian, Ph.D., Professor of Genetics, North Carolina State University, Raleigh

Panel: Henry N. Kirkman, M.D., Professor of Pediatrics and Director of Genetic Counseling Program, UNC School of Medicine, Chapel Hill; Harold O. Goodman,

Ph.D., Professor of Medical Genetics, Bowman Gray School of Medicine, Winston-Salem

12:00 Noon—Annual Address of the President
Charles W. Styron, M.D., Raleigh
ANNOUNCEMENTS
ADJOURNMENT

12:30 p.m.—LUNCHEON—Bowman Gray Medical Alumni (London Grill Room—The Carolina)

12:30 p.m.—Social Hour—North Carolina Society of Internal Medicine (Corner Cottage)

1:00 p.m.—LUNCHEON — North Carolina Society of Internal Medicine (Crystal Room—The Carolina)

Tuesday, May 23, 1972

HOUSE OF DELEGATES
(Second Session)

2:00 p.m. Cardinal Ballroom
(Agenda will be available)

POSTGRADUATE AND AUDIO-VISUAL PROGRAM

Tuesday, May 23, 1972 Azalea Room
Afternoon Session

John C. Grier, Jr., M.D., *Chairman*
Moderator: J. O. Williams, M.D., Concord

2:00 p.m.—ESCAPE FROM ADDICTION
Comprehensive, organized picture of chemical dependence in a straight forward, unemotional talk. View of addiction as it relates to alcohol, narcotics, and other drugs

2:25 p.m.—IRON: A TOTAL CLINICAL LEARNING EXPERIENCE
Oral vs parenteral iron; diagnosis of iron deficiency anemia; treatment. From pre-natal to the geriatric patient

3:00 p.m.—PSYCHOHORMONAL ASPECTS OF THE MENOPAUSE
Emotional symptoms in menopausal women usually correlate with their declining estrogen levels. Patient interview, discussion, laboratory demonstration. Value of replacement therapy

3:25 p.m.—HEAD INJURY
Lesions of the brain

4:00 p.m.—SAFE HOME
Simulated accidents dramatically reveal why safety features in cars are being pushed

6:30 p.m.—PRESIDENT'S RECEPTION (Pool-side)

7:30 p.m.—PRESIDENT'S DINNER (Main Dining Room)

9:00 p.m. to 1:00 a.m.—PRESIDENT'S BALL (Cardinal Ballroom)

Wednesday, May 24, 1972

7:30 a.m.—AUXILIARY BREAKFAST—1972-73 State Officers and Board of Directors (Crystal Room)

8:30 a.m.—Registration Opens—(West Lobby)

8:30 a.m.—Exhibits Open—Scientific and Technical (North Room and South Room)

#

THIRD GENERAL SESSION

Wednesday, May 24, 1972
(Cardinal Ballroom)

9:00 a.m.—CONVENE SESSION:
William H. Romm, M.D., Second Vice-President, Moyock, presiding

9:00 a.m.—CONJOINT SESSION—
North Carolina State Board of



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Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 51.50	\$128.50	\$179.50
40 - 49	78.00	189.00	240.50
50 - 59	114.00	260.50	312.00
60 - 64*	179.00	400.00	451.00

PLAN B—\$300 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 31.00	\$ 71.00	\$ 93.50
40 - 49	47.50	110.00	132.50
50 - 59	74.00	158.50	181.50
60 - 64*	112.50	251.00	273.50

PLAN C—\$500 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 19.50	\$ 43.00	\$ 57.00
40 - 49	32.00	74.00	88.00
50 - 59	51.50	114.00	127.50
60 - 64*	86.50	192.50	206.50
65 - 69	36.00	106.00	119.50

* Renewal rates only—When an Insured Member attains Age 65 he may continue to be insured under the \$500 Deductible Plan which is integrated with Medicare.

Semi-annual premium rates are one-half the annual rate plus fifty cents.

Term Life Insurance Program

Member's Age	\$10,000	\$20,000	\$30,000	\$40,000	\$50,000	Spouse's Age	\$5,000
Under 30	\$ 27	\$ 54	\$ 81	\$ 108	\$ 135	Under 30	\$ 11
30-34	29	58	87	116	145	30-34	12
35-39	38	76	114	152	190	35-39	15
40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
65-69	242	484	726	968	1,210	65-69	97

All Children—\$12 annually. \$2,500 after age 6 months

The above plans qualify for use in the Professional Association. Coverage reduces 50% upon attainment of age 65. Semi-annual premiums are one-half of the annual rate, plus 50 cents.

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INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.

CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.

WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.

PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.

ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.

HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

Health and Medical Society of State of North Carolina, James S. Raper, M.D., President, Asheville; Jacob Koomen, M.D., State Health Director, Raleigh, reporting

9:30 a.m.—PRESENTATION OF AWARDS

MOORE COUNTY, WAKE COUNTY AND GASTON COUNTY AWARDS

Scientific Exhibitor Award (Scientific Exhibits), Medical Student Exhibitor Award (Scientific Exhibits), F. M. Simmons Patterson, M.D. Chairman, Committee on Awards, presenting awards

PRESENTATION OF AMA-ERF CHECKS TO:

DUKE, UNIVERSITY SCHOOL OF MEDICINE

BOWMAN GRAY SCHOOL OF MEDICINE

UNC SCHOOL OF MEDICINE, A. J. Tannenbaum, M.D., Chairman, Committee on AMA-ERF to present

RECOGNITION OF NURSE OF THE YEAR, John N. Bennett, M.D., Chairman, Committee of Physicians on Nursing, to present

PRESENTATION OF FIFTY YEAR CLUB — Pins and Certificates, E. Harvey Estes, Jr., M.D., Secretary, to present

10:00 a.m.—CONCEPTS OF MEDICAL PRACTICE FOR THE FUTURE

Community Health Services, David Savitz, M.D., U. S. Public Health Service, Winston-Salem (Question and Answer Period)

10:45 a.m.—THE ROLE OF THE PHYSICIAN IN SPORTS MEDICINE

Frank C. Wilson, M.D., Chief, Department of Orthopaedics, N. C. Memorial Hospital, Chapel Hill (Question and Answer Period)

11:30 a.m.—Address: John Glasson, M.D., President, Durham

12:00 Noon—Registration closes

12:00 Noon—Exhibits close

12:00 Noon—PRESENTATION OF PRIZES

Josephine E. Newell, M.D., Chairman, Committee on Exhibits, presiding

#

ADJOURN SINE DIE

Correspondence

THE NEW FORMAT

To the Editor:

My compliments on the new format and printing of the JOURNAL. It is much easier to read and has a much "cleaner" appearance. The pages are all there and even in the right order.

All foolishness aside, this is the difference between the "home town" printing that we have had and professional printing and assembly. Hopefully, our prospective advertisers and contributors of article material will be more inclined to support the JOURNAL.

WILLIAM H. BURCH, M.D.

Lake Lure

To the Editor:

. . . I would like to say that the new format and printing of the NORTH CAROLINA MEDICAL JOURNAL is a vast improvement.

JANET J. FISCHER, M.D.

Chapel Hill

To the Editor:

Please accept an enthusiastic "thank you" for the many improvements in this issue of the NORTH CAROLINA MEDICAL JOURNAL. I am sure its improved appearance and style will be welcomed and will attract new readers throughout the Society.

T. REGINALD HARRIS, M.D.

Shelby

THE GUN EDITORIAL

To the Editor:

Having been associated with medical people for a number of years I have kind of associated them with people who think a little bit beyond the ordinary. They usually do more than scratch the surface when presented with a problem. I have never written a letter to an editor before but today I just can't control myself. How in the world did an editorial board of supposedly intelligent people pass on the article "The Gun and Its Victims"? When will people begin to think? Guns don't kill people. People kill

people. If they don't do it with a gun they will do it with a pitchfork or whatever is handy.

The series of data on this due to gunshot wounds is very interesting but after presenting this data, which is merely data, the authors draw sweeping conclusions about gun laws and legislation and things that have not been mentioned throughout the article at all. This is illogical and absolutely ridiculous. If one is going to draw a conclusion about legislation, certainly the body of the paper ought to contain some premises for that conclusion. The author might quote the experiences of various states that have tried rigid gun laws and document the reduction in crime and the changes in people because of these laws. The reason he didn't quote such is because this didn't happen. It has been said so often that it tends to be trite but I believe that it needs saying again—the main thing that strict gun laws do is to disarm the law abiding citizens and this is the very person that we don't want to disarm.

Shame on you as an Editorial Board.

E. S. WHITESIDES, M.D.

Gastonia

To the Editor:

I read with interest the article, "The Gun and Its Victims" in the December issue of the NORTH CAROLINA MEDICAL JOURNAL along with the editorial on page 505 entitled "A Major Silencer: The Gun."

According to the statistics given to me by the North Carolina Motor Vehicle Department, in 1969, 1,810 people died as a result of auto accidents. In 1970 1,772 people died by car accidents. As of this date, there have been 1,802 deaths recorded for 1971 with an expected final figure of somewhere in the neighborhood of 1,830 to 1,835. This is considerably higher than the number of deaths as recorded in the article by Dr. Fatteh. However, I have seen no articles suggesting stricter legislation concerning the availability of automobiles.

It seems to me that articles and particularly editorials pushing a change in legislation for something such as gun control is beyond the bounds of what should be found in a scientific publication.

I for one am a very avid hunter and very much of

a gun lover and I would like to register a very stringent complaint that an article and editorial of this type should be found in an NORTH CAROLINA MEDICAL JOURNAL.

BENTON S. SATTERFIELD, M.D.

Raleigh

Dr. Fattah replies:

The comments from Dr. Whitesides addressed to the Editorial Board of the NORTH CAROLINA MEDICAL JOURNAL deserve a rebuttal. Indeed, it would not be surprising to hear from any gun enthusiast statements to the effect "Guns don't kill people. People kill people." It would be absurd, however, to take this literally. There is no doubt that a person in a fit of anger is likely to produce different results with a gun in his hand from the one who hasn't. In an excellent article, "Murder and Gun Control" by Judge George Edwards in the January 1972 issue of the *American Journal of Psychiatry*, the words, "The possession of a handgun greatly increases the possibility that you or someone you love will be killed with or as a result of that weapon," I think, mean a lot. Our paper, "The Gun and Its Victims," does not imply that the law-abiding citizens should be radically disarmed. A question, however, must be asked as to how many people can

really use the gun for defense. The "mythology" of murder, it has been pointed out, causes many people to purchase arms as a means of self-defense, but in fact, it should be stressed, this greatly increases the hazard to themselves and their families. That you can protect yourself from murder by keeping a pistol somewhere in the house, I submit, is a myth.

Dr. Satterfield, in his letter, raises a question regarding the validity of statistics. Referring to the number of deaths caused by automobile accidents, he states that "In 1970, 1,772 people died from car accidents." In our paper we stated, "In 1970 automobile accidents, the sixth leading cause accounted for 1,732 deaths in North Carolina." The figure was obtained from the Vital Statistics Section of the State Board of Health of North Carolina.

Dr. Satterfield expresses concern regarding the advisability of publishing the article "The Gun and Its Victims" in the JOURNAL. The suggestions for authors contributing to the NORTH CAROLINA MEDICAL JOURNAL stress that the articles should be "educational," "original," and "historical," and I have no doubt that our article fulfills these criteria. I regret that some of the "avid hunters" and "gun lovers" cannot appreciate the thrust of the material. Finally, it must be pointed out that I was invited, by the Editor of the NORTH CAROLINA MEDICAL JOURNAL

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to write the editorial "A Major Silencer: The Gun." However, I take full responsibility for the statements made and the opinions expressed.

ABDULLA FATTEH, M.D., PH.D., LL.B.

Associate Chief Medical Examiner

Chapel Hill, N. C.

Dr. Fattah's original paper was reviewed by the editor and referees; no other members of the editorial board saw the paper prior to publication. The original version of the paper contained both facts and opinion. The opinions were removed and run separately as an editorial, signed by Dr. Fattah.

These actions are in keeping with the policies of the JOURNAL as stated in each January and July issue in the editorial section.—ED.

FAITH AND HEALING

To the Editor:

I am editing a book on the role of faith or religion in healing from a physician's standpoint. Any physician interested in contributing to this book, please write to the undersigned.

CLAUDE A. FRAZIER, M.D.

4-C Doctors Park
Asheville, N. C. 28801

Bulletin Board

WHAT? WHEN? WHERE?

In Continuing Education

March, 1972

I. Current Events in North Carolina

March 23, 9:00 a.m.

25th Annual Greensboro Academy of Medicine Symposium

Place: Jefferson Standard Club, Greensboro

Speakers: Jon K. Meyer, M. D., Johns Hopkins Hospital; John A. Oates, M.D., Vanderbilt; Richard M. Paddison, M.D., Louisiana State University Medical Center; Charles Rackely, M.D., University of Alabama; Edgar Ralston, M.D., University of Pennsylvania.

For Information: Charles M. Hassell, M.D., The Moses H. Cone Memorial Hospital, Pathology Department, 1200 N. Elm Street, Greensboro, 27405

April 10-11

Postgraduate Course in Obstetrics and Pediatrics

Place: Babcock Auditorium, Bowman Gray School of Medicine, Winston-Salem

Presented by: Division of Continuing Education and the Department of Obstetrics and Gynecology

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem, 27103

April 12-14

"3 Days of Cardiology for Nurses" on "Pre and Post Coronary Care"

Place: University of North Carolina School of Nursing, Chapel Hill

Sponsors: N. C. Heart Association and the Council on

Cardiovascular Nursing of the American Heart Association

Fee: Members of the Council on Cardiovascular Nursing—\$40 Non-members—\$55

For Information: Miss Barbara Bain, R.N., Nursing Education Coordinator, N. C. Heart Association, P. O. Box 2408, Chapel Hill, 27514

April 14-15

Annual Session of the Southeastern Region of the American Association of Medical Clinics

Place: Nalle Clinic, Charlotte

For Information: Dr. Luther M. Kelly, Jr., M.D., Nalle Clinic, 1350 South Kings Drive, Charlotte, 28207

April 17-22

Broadening Horizons of Health Care Managements

"The Manager: Facilitator of Patient Care"

Place: Carrington Hall, UNC, Chapel Hill

Tuition: \$75

Emphasis on effective utilization of communication in delegation of responsibility and correlation of levels of care

Johnston Scholarship (for tuition only) available to N. C. nurses who would otherwise be unable to attend

For Information: Mrs. Bonnie K. Hensley, Series Coordinator, Continuing Education, UNC School of Nursing, Chapel Hill, 27514

May 1-2

Anatomical and Clinical Considerations of the Hand

Place: East Carolina University

Fee: Practitioners and staff, \$100; Residents, \$50

For Information: ECU, Division of Continuing Education, Box 2727, Greenville, 27834

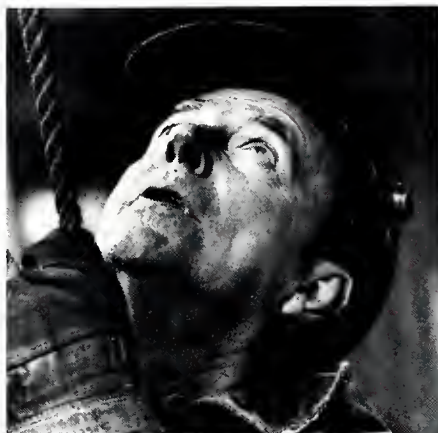
May 4-5

Symposium on Problems of Drug Abuse

Sponsored by: Division of Continuing Education, Bow-

Lofty Hemorrhoids

Mr. H.H., 55, high steel construction worker. For several years, other medications provided little or no relief from pain, burning, and itching of internal and external hemorrhoids. Made worse by much heavy lifting which increased pressure in the intrahemorrhoidal plexus. "It wasn't serious enough," so he procrastinated in consulting a doctor. Was also afraid the doctor might find something really serious. Bright blood appearing in the toilet bowl and on toilet tissue scared him into seeing doctor. However, careful history and examination disclosed internal hemorrhoids.



a typical
proctological
patient



to help
relieve the pain,
itching,
burning associated
with this and
similar anorectal
conditions

prescribe

**Anusol-
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suppositories
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acetate

Each suppository contains hydrocortisone acetate 10 mg, bismuth subgallate 2.25%, bismuth resorcin compound 1.75%, benzyl benzoate 1.2%, Peruvian balsam 1.8%, zinc oxide 11.0%, and boric acid 5.0%, plus the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base.

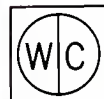
Precaution Prolonged or excessive use of Anusol-HC might produce systemic corticosteroid effects. Symptomatic relief should not delay definitive diagnosis or treatment.

Dosage and Administration Anusol-HC: One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol: One suppository in the morning, one at bedtime, and one immediately following each evacuation.

And for long-term patient comfort...

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Each suppository contains the ingredients of Anusol-HC without the hydrocortisone.



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man Gray School of Medicine, Winston-Salem
For Information: Emery C. Miller, M.D., Associate Dean
for Continuing Education, Bowman Gray School of
Medicine, Winston-Salem, 27103

May 18

23rd Annual Scientific Sessions of the N. C. Heart
Association

Theme: "Sudden Death"

Place: White House Inn, Charlotte

For Information: Mr. Jim Street, 1 Heart Circle, Chapel
Hill, 27514

May 20-24

Annual Meeting, State Medical Society

Place: The Carolina, Pinehurst

For Information: Mr. William N. Hilliard, Executive
Director, P. O. Box 27167, Raleigh, 27611

May 26-27

Eighth Annual E. C. Hamblen Symposium on Repro-
ductive Endocrinology and Family Planning

Sponsored by: The Department of Obstetrics and Gyne-
cology, Duke University Medical Center, Durham

Subjects:

I. Basic Reproduction Mechanisms;

II. Clinical Endocrinology

III. Fertility Control

For Information: Dr. Charles B. Hammond, P. O. Box
3143, Department of Obstetrics and Gynecology, Duke
University Medical Center, Durham, 27710

May 29

Congenital Anomalies of the Cardiovascular System: Thorax

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Place: East Carolina University

Fee: \$50

For Information: ECU, Division of Continuing Education
Box 2727, Greenville, 27834

June 4-9

The Seminar: Cooperative Program in Continuing Educa-
tion at Myrtle Beach, South Carolina has been can-
celled.

II. Coming Events in North Carolina September 22-26

State Medical Society Committee Conclave

Place: Mid Pines Club, Southern Pines

For Information: Mr. William N. Hilliard, Executive Di-
rector, P. O. Box 27167, Raleigh, 27611

III. Out of State (through June, 1972) March 21-23

Greenville Postgraduate Seminar

Fee: \$20

Sponsors: Greenville General Hospital and Greenville Coun-
ty Medical Society; SCRMP

For Information: Greenville General Hospital, 100 Mallard
Street, Greenville, S. C. 29601

March 22

Headache: Clinical and Neurologic Aspects

Sponsors: Vanderbilt University School of Medicine, De-
partment of Neurology and Division of Continuing Edu-
cation and Tennessee Mid-South RMP

Fee: \$15

For Information: Department of Neurology or Division of
Continuing Education, Vanderbilt University School of
Medicine, 110 21st Avenue, S., Nashville, Tenn. 37203

March 22

The Office in Medical Practice

Sponsors: Jackson-Madison County General Hospital, West
Tennessee Consolidated Medical Assembly and Tennessee
Academy of General Practice

For Information: Jackson-Madison County General Hos-
pital, 708 Wake Forest, Jackson, Tenn. 38301

March 22-24

Orthopedics for the Family Physicians

Fee: \$60

For Information: University of Tennessee College of Medi-
cine, 800 Madison Avenue, Memphis, Tenn. 38103

March 23

Symposium on the Problems of Aging

Place: William Hall Psychiatric Institute, Columbia, S. C.

Fee: \$10

For Information: Dr. Gordon Crandall, William Hall
Psychiatric Institute, Box 119, Columbia, S. C. 29202

March 27-29

Neurology for the Pediatrician

Place: Emory University School of Medicine, Department of
Pediatrics, 69 Butler Street, SE, Atlanta, Ga. 30303

Fee: \$75 members; \$105 non-members

For Information: American Academy of Pediatrics, 1801
Hinman Avenue, Evanston, Illinois 60201

March 29-31

Children's Orthopedics

Place: Marriott Hotel, Atlanta, Georgia

Fee: \$150

For Information: American Academy of Orthopaedic Sur-
geons, 430 N. Michigan Avenue, Chicago, Ill. 60611

April 6-8**Annual Resident's Conference**

Fee: \$25

Sponsors: Medical University of S. C., Department of Ophthalmology, 80 Barre Street, Charleston, 29401. Co-sponsor: S.C. RMP

April 8**Clinical Endocrinology**

Fee: \$15

For Information: Vanderbilt University School of Medicine, Department of Medicine and Division of Continuing Education, 110 21st Avenue S., Nashville, Tenn. 37203

April 14**Pediatric Day: Sutton Lectureship**

For Information: Box 91, Medical College of Virginia, Richmond, Virginia 23219

April 16**11th Annual Medical Symposium**

For Information: Bristol Memorial Hospital, Bristol, Tennessee 37620

April 21**"Swineford Allergy Conference"**

Sponsored by: University of Virginia School of Medicine Tumor Clinic

For Information: Continuing Education Program, University of Virginia Hospital, Box 333, Charlottesville, Va. 22901

April 21-22**"The Neonate" Pediatric Conference**

Place: University of Virginia School of Medicine Amphitheater

For Information: Continuing Education Program, University of Virginia Hospital, Box 333, Charlottesville, Va. 22901

April 23-25**3rd Annual Gynecological Cancer Conference**

Place: MUSC, Charleston, S. C.

For Information: Mrs. Helen O'Toole, Staff Assistant, Division of Continuing Education, MUSC, 80 Barre Street, Charleston, S. C. 29401

April 26-28**Gastroenterology**

Fee: \$75

For Information: Medical College of Georgia, 1459 Gwinnett Street, Augusta, Georgia 30902

April 27-29**Annual Residents' Conference—Ophthalmology**

Place: MUSC, Charleston, S. C.

For Information: Mrs. Helen O'Toole, Staff Assistant, Division of Continuing Education, MUSC, 80 Barre Street, Charleston, S. C. 29401

April 27-29**Pulmonary Physiology and Pulmonary Function Testing**

Place: VA Hospital, Charleston, S. C.

For Information: Mrs. Helen O'Toole, Staff Assistant, Division of Continuing Education, MUSC, 80 Barre Street, Charleston, S. C. 29401

May 2**Annual Scientific Assembly**

Place: Medical College of Virginia

For Information: Box 91, Medical College of Virginia, Richmond, Virginia 23219

May 3-5**Complications of Trauma**

Place: Peabody Hotel, Memphis, Tennessee

Fee: \$150

For Information: American Academy of Orthopaedic Surgeons, 430 N. Michigan Avenue, Chicago 60611

May 8-12**The Medical and Surgical Treatment of Cardiovascular Disease**

Place: Royal Coach Motor Hotel, I-75 and Howell Mill Road, Atlanta, Ga.

Sponsored by: Council on Clinical Cardiology American Heart Association; Departments of Medicine, Surgery, Pediatrics, Pathology and Radiology Emory University School of Medicine; and Georgia Heart Association

For Information: Miss Mary Anne McInerney, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

May 26**Annual Spring Forum for Child Psychiatry**

Place: Medical College of Virginia

Sponsors: Medical College of Virginia, Box 91, Division of Child Psychiatry, Richmond, Virginia 23219; and Virginia Treatment Center for Children

May 26-27**Concepts in Health Care Delivery**

Fee: \$15

For Information: Meharry Medical College, 1005 18th Avenue N., Nashville, Tennessee 37208

June 8-11, 8 a.m.- 1 p.m.**"Cardiac Arrhythmias"**

Place: Cavalier Hotel, Virginia Beach, Virginia

Sponsors: Council on Clinical Cardiology, American Heart Association, and Tidewater Heart Association

For Information: Charles L. Baird, Jr., M.D., Medical College of Virginia, Box 894, Richmond, Virginia 23219

Send information for listing to WHAT, WHEN, WHERE, Box 8248, Durham, North Carolina 27704. To be listed in a specific issue, information must be received by the 10th of the preceding month. Issues are scheduled for appearance on the 15th of each month.

News Notes from the—**DUKE UNIVERSITY MEDICAL CENTER**

Construction has begun on a new half-million dollar addition to the School of Nursing at Duke.

The one-story, 15,000-square foot facility, located adjacent to the present Hanes House on the Duke campus, will contain faculty and staff offices, a lecture hall, conference rooms, and the dean of nursing's suite for her office and staff.

The new building will be made of concrete and stucco finish and trimmed with Duke's characteristic Hillsborough stone.

The Hanes House addition, in planning stages since 1970, will be funded in large part by a \$308,759 federal grant from the National Institutes of

Health. The Medical Center also received \$200,000 from the Andrew W. Mellon Foundation and \$58,000 from the Duke Endowment for the facility. The building cost is estimated at \$571,468.

* * *

Charles H. Frenzel, director of Duke's Graduate Program in Hospital Administration and former administrator of Duke Hospital, became executive vice president of the Mercy Catholic Medical Center in Philadelphia Jan. 31.

Frenzel held a professorship in hospital administration at Duke. He served as superintendent of Duke Hospital from 1958 until 1964 when he became administrative director of the Duke Medical Center. In 1967 he assumed expanded responsibilities for direction of the Graduate Program in Hospital Administration.

* * *

In a move to upgrade drug distribution in the Hospital, the Duke Pharmacy Department has instituted a "unit dose" pilot project on Cushing and Halsted, two general surgery wards.

Unit dose dispensing is defined as a system whereby medication doses are prepared, packaged, labeled, and dispensed in a quantity sufficient for each patient for a certain period of time.

On the wards now served by the unit dose system, drugs are unit dose dispensed by pharmacists in a satellite pharmacy on Cushing. The pharmacists

work directly from physicians' written drug orders and handle everything involved in drug preparation until the oral dosages, injections, and other medications are given to the nurse for administration.

Twice a day a medication cabinet containing small medication drawers, one for each patient, is delivered to the nurse on each ward nursing team. In each drawer are the individual drug doses needed by that patient until it is replaced by another full cart later in the day or the following day.

The nurse then administers the medication at the proper times, by checking the patient's drug record prepared for her by the pharmacy.

Pharmacy Director Milton Skolaut said advantages of the new system include reduction of the chance for medication errors and freeing nurses from "pharmacist" duties, allowing them more time to devote to patient care.

* * *

Dr. Jack J. Goodrich, director of the division of nuclear medicine, was appointed chairman of the Food and Drug Administration's Medical Advisory Committee on Radiopharmaceuticals. Presently a member of the committee, he assumes the chairmanship in June.

Goodrich was also chairman of the Committee on Awards at the Midwinter Trustees Meeting of the Society of Nuclear Medicine in Denver, Colo. Jan. 21-23.

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advertised CONTINUOUSLY in the N. C. Journal since January 1940 issue.*

Dr. William W. Shingleton, professor and chief of the division of general surgery, was invited by President Nixon to witness the signing of the National Cancer Act at the White House.

* * *

Dr. Eric Pfeiffer, associate professor of psychiatry, was elected chairman of the North Carolina Mental Health Council. Pfeiffer will serve through 1973.

* * *

Dr. J. W. Everett, professor of anatomy, was an invited discussant at a symposium on "The Use of Non-Human Primates for Research on Problems of Human Reproduction," held in Sukhumi, Georgia, USSR Dec. 13-17. Everett was one of 15 participants from the United States at the meeting, which was sponsored by the World Health Organization.

The site of the meeting was chosen because of the presence in Sukhumi of one of the earliest and largest primate colonies in the world.

* * *

A Stanley J. Sarnoff Visiting Professorship in Cardiology has been established at Duke.

The professorship is named for the well-known heart specialist who was formerly director of the cardiovascular physiology laboratory at the National Heart Institute in Bethesda, Md. Sarnoff, who has had a continuing interest in cardiovascular medicine at Duke, is currently president of Survival, Inc., of Bethesda.

Dr. Andrew G. Wallace, chief of the division of cardiology said the purpose of the professorship is to bring to the Duke campus skilled researchers and teachers who are interested in areas relevant to the care of patients with heart disease. Sarnoff's gift to the program will sponsor three guest professors at Duke each year for the next five years.

Dr. Donald L. Fry, head of the section on clinical biophysics of the National Heart and Lung Institute's Cardiology Branch, just completed his stay at Duke as the first Sarnoff visiting professor. Fry's major field of interest is the biophysical aspect in the development of atherosclerosis.

Beginning Jan. 27, Dr. Michael S. Gordon, associate professor of medicine at the University of Miami, will be the second cardiologist to hold the visiting professorship. Gordon, who received his medical education at the University of Illinois and did postgraduate study at both Georgetown Medical Center in Washington, D. C., and at the Mayo Clinic in Minnesota, will center his presentations on techniques for teaching physical diagnosis.

The third Sarnoff lecturer in 1972 will be Dr. William Roberts, chief of pathology at the National Heart Institute, who will come to Duke in April. His special field of interest is isolated aortic valve disease.

General Motors announced a \$72,231 research and engineering grant, with an initial payment of \$40,000, to Duke.

It will support investigation into a means of identifying and arousing the sleepy driver. The principal investigator at Duke will be Dr. C. William Erwin, an associate professor of psychiatry.

* * *

Dr. R. Wayne Rundles, professor and chief of the division of hematology, was elected a director-at-large of the American Cancer Society and will serve a two-year term.

Rundles also participated in the first postgraduate course on cancer at Guayaquil, Ecuador, recently. The course was sponsored by the American Cancer Society and the Ecuador Society for the Prevention of Cancer. He was elected Miembro Adherente of the Ecuador society.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

The 12-member Board of Directors of North Carolina Memorial Hospital has appointed John Martyn Danielson, now of the Association of American Medical Colleges in Washington, D. C., to be Director of N. C. Memorial Hospital at the University of North Carolina in Chapel Hill, effective April 1, 1972.

Danielson has held hospital administrative posts at the Johns Hopkins University, Roosevelt Hospital in New York, North Shore Hospital at Manhasset, L. I., and the Evanston (Ill.) Hospital affiliated with Northwestern University.

Since 1969 he has been Director of Health Services and Teaching Hospitals for the Association of American Medical Colleges.

Danielson's selection is the first major appointment to be made under a change in the management and operations of the hospital at Chapel Hill under provisions of the law passed by the 1971 General Assembly in which there is a separate board of directors for the hospital, apart from the administration of the University at Chapel Hill.

* * *

Dr. Don W. Powell, assistant professor in the Department of Medicine, has been awarded a \$44,000 National Institutes of Health grant for research on the intestinal absorption of water and electrolytes.

Recent investigation has demonstrated that under certain circumstances, such as many diarrheal diseases, movement of water and electrolytes is in the opposite direction—from the blood stream into the intestine, Dr. Powell explained.

"This secretion of water and electrolytes appears

to play a major role in the production of diarrhea yet the mechanism of this secretion is poorly understood and has not been thoroughly investigated," he said.

Dr. Powell's overall research goal will be to explore and attempt to understand the mechanism of intestinal secretion at both the organ and cellular level.

* * *

A UNC health educator suggested in Atlanta recently that health educators must reach the decision makers, not just the public, if they are to bring about improvements to the delivery of health care across the nation.

Dr. C. Arden Miller, who is chairman of the American Public Health Association's Action Board, said he is convinced that "in matters of delivery of health care our public is already well educated beyond the performance of our health institutions and agencies, both public and private." Dr. Miller is former UNC vice chancellor for health sciences.

* * *

Dr. Frank W. McCracken III has been appointed director of clinics at the UNC School of Dentistry, effective immediately.

Dr. McCracken joined the faculty September 1968, as an assistant professor in the Department of Removable Prosthodontics. He was also assistant director of the Dental Regional Medical Program until July 1971.

* * *

Drs. Doris P. Bradley and Donald W. Warren of the UNC School of Dentistry have been awarded Fellowship by the American Speech and Hearing Association.

Dr. Bradley, director of the Oral-Facial Communicative Disorders program, was honored for contributions to graduate education in speech pathology and audiology, professional programs of the Association and research related to language development and cleft palate.

Dr. Warren, chairman of the Dental Ecology Department, was recognized for his research in speech problems related to cleft palate.

* * *

Dr. Irwin Clark, professor of surgery and biochemistry, has been awarded a \$29,112 National Institutes of Health grant for study of two problems relating to the growth and development of the skeleton.

The orthopaedic researcher will study a group of enzymes called transfer RNA methylases whose activities are increased in rapidly growing tissue, cancer tissue and tissues undergoing differentiation.

He will also be involved in the determination of the composition and biochemical action of a "bone growth factor." This factor when injected along side a bone of an experimental animal, causes it to de-

posit new bone completely around the pre-existing bone.

* * *

Dr. William D. Heizer of the UNC School of Medicine has been awarded \$5,000 by Travenol Laboratories, Inc. to further test and perfect a simplified method for giving patients intravenous hyperalimentation at home. The technique used required creation of an internal arteriovenous fistula in the forearm identical to that used for patients undergoing chronic hemodialysis.

* * *

The UNC Medical School's Department of Pediatrics here has received a \$26,000 grant from the National Foundation-March of Dimes to fight birth defects.

The program is under the direction of Dr. Robert T. Herrington, director of the N. C. Memorial Hospital Pediatric Clinic.

Treatment centers established under auspices of these grants will make genetic counseling available to families. In addition, facilities are available for early recognition of many conditions so that proper treatment might prevent later defects.

* * *

More than a score of educators, industrialists and business leaders were on hand recently for the dedication of the C. V. Richardson Cardiac Catheterization Laboratory in N. C. Memorial Hospital.

Named for C. V. Richardson, the Star, N. C. hosiery manufacturer, the laboratory will be used for diagnosis of complex heart conditions. Richardson funded construction of the laboratory in late 1970.

* * *

In recognition of her dedicated service to the auxiliary and the hospital, N. C. Memorial Hospital Auxiliary has furnished a family waiting room in the emergency unit of the hospital in honor of Mrs. W. Reece Berryhill, wife of the first dean of the UNC School of Medicine.

* * *

UNC's Margaret B. Dolan, new president-elect of the American Public Health Association, spent the second half of January and all of February as a consultant at Mahidol University in Bangkok, Thailand.

Dr. Dolan who is chairman of the School of Public Health's Department of Public Health Nursing, worked with the Mahidol faculty on the reorganization of its curriculum.

Her work in Thailand was part of a contractual agreement between the UNC School of Public Health, the Agency for International Development of the U.S. State Department and the Mahidol University.

* * *

Among 16 full-time appointees in the UNC Division of Health Affairs, the following were added to the faculty of the School of Medicine:

Edith K. MacCrae, professor of anatomy, taught

at the University of California at Berkeley and the University of Illinois before coming to UNC as a visiting professor last year. She earned her B.S. degree at Bates College, and holds the M.S. and Ph.D. degrees from Columbia University.

Emile E. Werk holds a joint appointment as professor in the School of Medicine and as Director of the UNC Teaching Service at New Hanover Hospital. He is president-director of the Endocrine Laboratory at Cincinnati General Hospital. A graduate of Williams College, he received his M.D. degree from the University of Cincinnati College of Medicine.

Henry S. Hsiao, assistant professor in the Department of Surgery, has taught at M.I.T. He holds degrees from both M.I.T. and the University of California at Berkeley.

Frederick G. Wiegand, assistant professor in the Department of Obstetrics and Gynecology, has taught at Boston University School of Medicine and Tufts College of Medicine. From 1969 until his appointment, he has been clinical assistant professor at UNC.

* * *

Dr. C. Arden Miller, professor of maternal and child health and former UNC vice chancellor for health sciences, has been named chairman of the policy-making Action Board of the American Public Health Association (APHA).

The Action Board formulates, plans, organizes and pursues the implementation of APHA policies and positions, including development of the annual legislative program.

* * *

Janis Newton has been appointed assistant director of the Office of Continuing Education and Field Service and lecturer in the Department of Health Education at the UNC School of Public Health here.

Mr. Newton's major responsibilities will be in the design and implementation of continuing education program management courses, conferences, workshops and seminars. A special emphasis will be the use of media for learning and communication.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE WAKE FOREST UNIVERSITY

Appointments for three new faculty members at the Bowman Gray School of Medicine were announced recently. They were Dr. Arnold S. Kreger, assistant professor of microbiology; Dr. David L. Green, instructor in orthopedics; and Dr. Frederick W. Kremkau, research instructor in medicine and research associate in neurology.

Dr. Kreger, a former research assistant professor of the New York University School of Medicine, will have responsibilities in the teaching and research programs in the Department of Microbiology. His principal research interests deal with the study of microbial products, particularly proteins produced by bacteria, and the role they play in infectious disease.

He holds the B.S. degree from Brooklyn College of Pharmacy and the M.S. and Ph.D. degrees from the University of Michigan. He took two years of postdoctoral training at New York University School of Medicine and served an additional year as research associate before being named to the NYU faculty.

Dr. Green recently completed a fellowship in reconstructive hip surgery, including total hip replacement, with the Harris-Aufranc group in Boston, Mass. He also held teaching positions at Massachusetts General and Shattuck Hospitals in Boston. Earlier he took six months of special training at Princess Margaret Rose Hospital, Edinburgh, Scotland.

Dr. Green, who will be engaged in teaching, patient care and research, holds the A.B. and M.D. degrees from Indiana University. He interned at San Francisco General Hospital and completed residency training in orthopedic surgery at the University of California Medical Center in San Francisco.

Dr. Kremkau, who recently completed requirements for the Ph.D. degree in electrical engineering at the University of Rochester, will have primary responsibilities in oncology research. His work will include a study of the effects of ultrasound on the function of normal and abnormal cells.

Dr. Kremkau holds the B.E.E. degree from Cornell University and the M.S. degree from Rochester University.

* * *

Michael D. Sprinkle, former director of the Medical Library Center of New York, has been appointed librarian at the Bowman Gray School of Medicine.

He came to the medical school from the University of Kentucky where he was associate director of the medical center library which serves five colleges.

Sprinkle holds the A.B. degree and the M.S. degree in library science from the University of North Carolina at Chapel Hill. He took an additional year of study in computer librarianship at Washington University School of Medicine in St. Louis, Mo.

While at the Medical Library Center of New York, he developed the Union Catalog of Medical Periodicals, a system which was adopted by the National Library of Medicine as standard for its Regional Medical Library Programs.

In his new position he succeeds Mrs. Erika Love, who accepted the position of administrative librarian and associate deputy director of library operations at the National Library of Medicine, Washington, D. C.

Dr. Stephen G. Anderson, assistant professor of obstetrics and gynecology at Bowman Gray, participated in a recent meeting of the South Atlantic Association of Obstetricians and Gynecologists in Miami Beach, Fla. He discussed a paper on "Amniotic Fluid Embolism."

* * *

Dr. Kenneth P. Chepenik, assistant professor of anatomy, recently took part in a seminar at the University of California at Irvine. He spoke on "Some Effects of Teratogen on Mitochondrial Function in Rat Embryos."

* * *

Dr. M. Robert Cooper, associate professor of medicine, presented a paper on "Rheological Properties of Dextran, Urea and Potassium Cyanate in Sick Cell Disease" at the Twentieth Annual Symposium on Blood at Wayne State University in Detroit, Michigan.

* * *

Dr. Lawrence R. DeChatelet, assistant professor of biochemistry presented a paper on "Effect of Catecholamines on Biochemical and Functional Activities of the Neutrophil" at the Southern Section of the American Federation for Clinical Research in New Orleans, La.

* * *

Dr. John P. Gusdon Jr., associate professor of obstetrics and gynecology, presented a paper on "Promethazine-HCl as an Immunosuppressant" at a recent meeting of the Reticuloendothelial Society in Detroit, Mich.

* * *

Dr. Richard W. St. Clair, associate professor of pathology, has been appointed to the Pathology Research Study Committee of the American Heart Association. He will serve from Jan., 1972 to Dec., 1974.

NORTH CAROLINA SOCIETY OF INTERNAL MEDICINE

Dr. Monroe T. Gilmour has been awarded the Distinguished Internists Award for 1972 by the North Carolina Society of Internal Medicine. Dr. E. Thomas Marshburn, president, NCSIM, in making the presentation cited Dr. Gilmour's determination to always strive for perfection, never compromising for mediocrity; his intellectual brilliance and Christian humanism, and unusual strength and courage.

The presentation noted that Dr. Gilmour graduated from Davidson College *summa cum laude* and Harvard Medical School with AOA academic honors. He was one of the first modern "internists"

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Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monoamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage in Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage in Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

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to practice internal medicine in the city of Charlotte during the onset of World War II. Despite a number of disabling health problems, he has carried a heavy professional practice with the vision to organize a group of partners into the clinic of internal medicine, now numbering seven physicians.

All of this, while he has performed, in addition, an almost unbelievable number of services and activities. He holds membership in seven professional societies, and medical staff appointments in three hospitals in Charlotte. He has served on the Board of Directors of many community agencies. He has been involved with the city government of Charlotte, serving on five appointed study groups, and has also served in many organizational groups of the Presbyterian Church at the local and state level.

NEWS NOTES

Dr. Donald B. Koonce has been named a member of a ten-member Advisory Committee on Cancer by the Board of Trustees of the American Medical Association.

The committee—the first to be established by the AMA on a specific disease—will advise on developments in research, on government supported cancer programs, and activities that can be undertaken by the AMA in professional and public education.

Dr. Koonce is a Past President of the State Medi-

cal Society, the North Carolina Chapter of the American College of Surgeons, the North Carolina Division of the American Cancer Society, and the New Hanover County Medical Society.

He served on the Governor's Commission to Study the Cause and Control of Cancer in North Carolina from 1962 through 1968, as vice chairman and chairman. He has served as a North Carolina Delegate to the AMA since 1965 and has served as a District Councilor and Speaker of the House of Delegates of the State Society.

* * *

Elected to office at the general membership meeting of the Association of Professors of Dermatology held in Chicago recently was Dr. Clayton E. Wheeler, Jr., of Chapel Hill, secretary of the Association.

NATIONAL INSTITUTE OF MENTAL HEALTH

The National Institute on Alcohol Abuse and Alcoholism and the Division of Narcotic Addiction and Drug Abuse, both within the National Institute of Mental Health, has jointly announced a new grant program to help medical schools develop

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Clinical Psychology:

Thomas C. Camp, Ph.D.
Card McGraw, Ph.D.
David F. Strahley, Ph.D.

Don Phillips, Administrator
R. Lindsay Shuff, M.H.A.
Asst. Administrator

AFFILIATED CLINICS

Bluefield Mental Health Center
525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
Leslie J. Borbely, M.D.

Mental Health Clinic
Professional Building, Wise, Va.
Pierce D. Nelson, M.D.

courses of instruction on two of the foremost health problems in the United States today—drug abuse and alcohol abuse.

The new program provides medical faculty the opportunity to pursue expertise in the drug abuse and alcohol abuse areas through one or two years of specialized training. Faculty members trained with grant support under this program would then have the responsibility to assume leadership in developing effective drug abuse and alcohol abuse curricula within their medical schools.

Statement of Sterling Drug Inc. on PhisoHex

The proposal of the Food and Drug Administration to place pHisoHex on a prescription basis is, we believe, both premature and illogical. We do not think that the action can be justified on grounds of either safety or science. Further, the action anticipates a study to be carried out by FDA's own panel of experts and appears to us to be an instance of prejudice.

The FDA has based its decision on inconclusive and incomplete animal studies, the results of which we believe cannot be automatically translated to human experience.

Against these small and inconclusive experiments, there stands the unparalleled record of safety and effectiveness of pHisoHex in human use over the past 22 years. Since its introduction in 1949, pHisoHex has been used hundreds of millions of times by members of the health profession and by consumers. In all this massive experience, there has not been a single reported case of neurotoxicity due to pHisoHex when used as directed.

More specifically, in carefully controlled studies—published in the scientific literature and covering more than 102,000 infants in 72 hospital nurseries—there were only 11 reported instances of side effects, all of which were skin irritations.

Prior to the introduction of pHisoHex and similar products into routine hospital usage there were thousands of cases of staphylococcal infections each year among babies in nurseries and among hospital nurses. Many of these infections resulted in death. Over the years, the use of pHisoHex and similar products, coupled with careful procedures, reduced the incidence of severe staphylococcal outbreaks literally to zero.

Significantly, we have been informed that epidemics of staphylococcal infections have broken out in the nurseries of four hospitals which discontinued the use of pHisoHex subsequent to issuance of the FDA bulletin on Hexachlorophene, dated December 9, 1971. The inference to be drawn is obvious.

The FDA action, in our opinion, appears illogical. The safety of pHisoHex will not be increased by requiring a prescription for its purchase. All that will be accomplished is to lessen its proper use and increase the possibility of serious infection.

Gantrisin® (sulfisoxazole) Roche® provides your patients with many important advantages:

- high urinary levels
- generally good tolerance
- high solubility at average urinary pH
- rapid absorption
- rapid renal clearance
- high plasma concentrations
- economy (average cost of therapy: less than 6½¢ per tablet)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully coordinated with bacteriologic and clinical response. When the patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture media.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in pregnancy has not been established. Sulfonamides will not eradicate proper A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalyses with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoproteinemia, methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. *Gastrointestinal reactions:* Nausea, vomiting, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria. Periarthritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarities to some poisons, diuretics and oral hypoglycemic agents. Grutter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.



In acute, recurrent or chronic nonobstructed cystitis

TWO BUILT-IN BENEFITS OF GANTRISIN[®] sulfisoxazole/Roche[®]

1.

High urinary drug levels

Gantrisin quickly reaches peak antibacterial concentrations in the urine—usually in 2 to 3 hours. With the recommended dosage regimen, Gantrisin maintains these high urinary levels throughout therapy to combat such susceptible organisms as *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

2.

Generally good tolerance

Because of Gantrisin's high solubility and rapid excretion, therapy is relatively free of adverse reactions serious enough to require discontinuance of the drug (3.1% of 1002 patients in a recent study*). Even minor reactions are comparatively infrequent, but may include nausea, headache and vomiting. For other possible undesirable reactions, and precautions, please see summary of prescribing information on opposite page.

*Koch-Weser, J., et al.: Arch. Intern. Med., 128:399, 1971.

For nonobstructed cystitis

begin with

Gantrisin[®]
sulfisoxazole/Roche[®]

Usual adult dosage:

4 to 8 tablets stat
2 to 4 tablets q.i.d.



What effect will the FDA action have on doctors and the public?

First, by requiring consumers to obtain a prescription to buy pHisoHex, the FDA is placing an additional burden on the nation's overworked physicians.

Secondly, unless they bear the added cost and inconvenience of obtaining a prescription, millions of Americans will have to cease using the safe and effective antibacterial skin cleanser.

Mothers who wash their hands with pHisoHex before handling their babies, practical nurses, and

others who use pHisoHex in the sick room will be deprived of the product's germ-killing effectiveness. For the general public, the danger of hand-borne contamination of food will be increased, since restaurant workers, butchers, cannery workers and other food handlers who customarily utilize pHisoHex may no longer have it readily available.

Thus the net result of the FDA proposed action may be a widespread increase in serious and perhaps fatal infections, an additional burden on the nation's doctors, an increased cost and inconvenience to the public—all without equivalent benefit to anyone.

Month in Washington

President Nixon said his Administration will expand its programs to improve the nation's emergency medical services and to combat diseases of the heart, blood vessels and lungs.

In the long version of his two State of the Union messages to Congress, the President said the "staggering" U.S. death toll from accidents—more than 115,000 last year—"could be greatly reduced by upgrading our emergency medical services." He said it could be done without new scientific breakthroughs if present knowledge were applied more effectively.

"To help in this effort," he said, "I am directing the Department of Health, Education and Welfare to develop new ways of organizing emergency medical services and of providing care to accident victims. By improving communication, transportation, and the training of emergency personnel, we can save many thousands of lives which would otherwise be lost to accidents and sudden illnesses.

"One of the significant joint accomplishments of the Congress and this administration has been a vigorous new program to protect against job-related accidents and illnesses. Our occupational health and safety program will be further strengthened in the year ahead—as will our ongoing efforts to promote air traffic safety, boating safety, and safety on the highways.

"In the last three years, the motor vehicle death rate has fallen by 13%, but we still lose some 50,000 lives on our highways each year—more than we have lost in combat in the entire Vietnam war.

"Fully one half of these deaths were directly linked to alcohol. This appalling reality is a blight on our entire nation—and only the active concern of the entire nation can remove it. The federal government will continue to help all it can, through its efforts

to promote highway safety and automobile safety, and through stronger programs to help the problem drinker."

Nixon promised increased attention to the diseases of the heart, blood vessels and lungs "which presently account for more than half of all the deaths" in the nation.

"I will shortly assign a panel of distinguished experts to help us determine why heart disease is so prevalent and so menacing and what we can do about it," he said. "I will also recommend an expanded budget for the National Heart and Lung Institute."

He also called upon Congress to act upon his proposals for national health insurance, health maintenance organizations and elimination of the monthly fee now charged under part B of Medicare.

The President said he later will propose legislation "to reform and rationalize" the delivery of social services, including health services.

* * *

In his fiscal 1973 budget, Nixon estimated federal spending on HEW health programs at \$18.1 billion, an increase of \$1.1 billion over the current fiscal year which ends next June 30. A breakdown under broad categories shows:

HEALTH			
(Fiscal years, millions of dollars)			
	1971 (actual)	1972 (est.)	1973 (est.)
DEVELOPMENT OF HEALTH RESOURCES			
Budget authority	2,293	2,965	2,851
Outlays	2,201	2,446	2,787

	1971 (actual)	1972 (est.)	1973 (est.)
FINANCIAL MEDICAL SERVICES			
Budget authority	12,657	15,633	20,115
Outlays	11,946	14,214	14,733
PREVENTION AND CONTROL			
Budget authority	360	571	737
Outlays	319	382	619
OFFSETTING RECEIPTS			
Budget authority	3	18	22
Outlays	3	18	22
TOTALS			
Budget authority	15,307	19,151	23,681
Outlays	14,463	17,024	18,117

The fiscal 1973 budget calls for a \$49 million increase—to \$435 million—for delivery of health services programs — health maintenance organizations, regional medical programs, and health planning agencies.

Expenditures for Medicare and Medicaid were estimated to increase by \$492 million. The federal share of Medicaid was estimated at \$3.4 billion or 55% of the total cost. Outlays for Medicare were estimated at \$10.4 billion in fiscal 1973.

Other spending estimates included:

Food and Drug Administration—\$179.5 million, an increase of \$69.7 million.

National Institutes of Health (mostly biomedical research)—\$1.57 billion, an increase of \$139 million. Of this, \$430 million goes to the Cancer Institute.

The President's Council of Economic Advisers, in its annual report to Congress, cautioned that money alone does not hold the solution to the nation's health problems. New criteria for evaluating medical care should be developed, the council said.

The council said that the nation's medical care expenditures totaled \$75 billion—\$358 per person—in fiscal year 1971, an annual growth rate of 4.3% per capita since 1966.

* * *

The federal government announced the first assignments of federal doctors and other health workers to provide direct patient care in rural and big city areas with critical health manpower shortages.

Teams with a total of 68 medical workers, including doctors, dentists and nurses, will be assigned to 18 communities in 13 states to work with such patient groups as Indians, migrant workers, welfare families, and minorities.

The first team, a husband-wife, doctor-nurse duo, was assigned to a 14-bed hospital in rural Jackman, Maine, in September. The second team went to work in Immokalee, Fla., in November. March 1 is the target date for assigning the other 16 teams, a

spokesman for the National Health Service Corps said.

The Corps was created Dec. 31, 1970, when President Nixon signed the Emergency Health Personnel Act, which calls for government health workers to provide direct health services to residents of city slums and remote rural areas designated as having critical health manpower shortages.

The lag in starting the project had sparked charges by some Congressional Democrats that the Administration was delaying it. The Administration had replied that recruitment was difficult.

Dr. David A. Kindig, recruitment chief for the Corps, admitted that the major incentive for doctors to join had been the military draft. All 28 doctors among the 68 initial medical workers were recruited from the Public Health Service (PHS) Commissioned Corps, and "many of them are still fulfilling their military obligations," he said.

The teams also include 10 dentists, 18 nurses and 12 other professionals, including pharmacists, dental hygienists, health educators and lab technicians, Kindig said. Recruitment of some team members, like nurses, may be done at the local level, he said.

* * *

The Nixon Administration said that it hopes to transfer eight U.S. Public Health Service (PHS) hospitals and 30 government clinics to local control by June 30, 1973.

Health, Education and Welfare Secretary Elliot L. Richardson said President Nixon's budget for the fiscal year beginning next July 1 "assumes that these facilities will be converted to community use by June 30, 1973." The budget is expected to go to Congress next Monday.

The hospitals, with a combined 2,484 beds, are in Baltimore; New Orleans; Statton Island, N. Y.; San Francisco; Seattle; Norfolk, Va.; Boston, and Galveston, Tex.

"We cannot yet predict what effect the current reviews of PHS hospitals and clinics will have on those now employed in those installations," Richardson said in a statement. "No change in employment as a result of these reviews will occur this fiscal year (ending next June 30)."

Richardson's announcement said an administration decision has been made to eliminate 8,087 HEW jobs between now and next June as part of a government-side plan to reduce federal employment.

* * *

President Nixon signed an executive order establishing the Office of Drug Abuse Law Enforcement which will marshal a wide range of government resources "in a concentrated assault on the street level heroin pusher."

Miles J. Ambrose who had been Customs Commissioner was appointed to head the new office.

"I am convinced that the only effective way to fight this menace is by attacking it on many fronts

—through a balanced, comprehensive strategy," Nixon said in a statement.

He said the Administration has worked for three years to eliminate dangerous drugs at their source, cutting off their international flow.

"Today our balanced comprehensive attack on drug abuse moves forward in yet another critical area as we institute a major new program to drive drug traffickers and drug pushers off the streets of America," he said.

Nixon praised Ambrose, 45, a lawyer and former New York enforcement official, as a man "who knows how to take care of this problem of law enforcement."

Nixon said the office would work through nine regional offices and use special grand juries to gather information about drug traffickers. He said this intelligence will be pooled for use by federal, state and local law enforcement agencies.

The latest FBI uniform crime statistics available show that 451,000 persons were arrested in 1970 for narcotic drug law offenses, up 44 per cent from 1969 but accounting for just 4.8 per cent of arrests for all offenses in 1970.

In 1970, the FBI noted that 53 per cent of all persons arrested on drug-related charges were under 21 years of age.

Book Review

Surgery and the Allergic Patient. Edited by Charles A. Frazier, M.D. 191 pages. Price \$12.50. Springfield, Illinois: Charles C Thomas, Publisher, 1971.

Surgery and the Allergic Patient, edited by Claude A. Frazier, is for the most part an excellent book. As is the case with any multi-authored book, there is some repetition but not an excessive amount. Particularly well written and definitive are chapter 3, "Medical Management of the Allergic Child Before and After Surgery"; chapter 4, "Presurgical Evaluation of the Adult Asthmatic Patient"; and chapter 7, "Surgery and the Allergic Patient." I am glad to note that the glomectomy operation for the treatment of asthma is debunked by the distinguished thoracic surgeon, Dr. Brian Blades; and in chapter 9, on contact dermatitis a number of "pearls," even for an allergist, are encountered.

There are some omissions and treatments with which I do not agree. In chapter 2, adrenalin in oil is recommended. This product contains peanut oil which is sensitizing and should not be used in allergic patients. In chapter 3, deramethasone is recommended. This steroid is probably more potent than is generally realized and should, I believe, be discarded in favor of hydrocortisone and/or prednisone. There is also in this chapter a suggestion that tetracycline be used without the definition of a lower age limit, and in the discussion of the hospital hazards for the eczema patient exposure to herpes simplex is not mentioned. In chapter 5, it is suggested that immunoglobulins be measured by electrophoresis (instead of by immunoelectrophoresis or immunodiffusion). In chapter 10, "Ear, Nose and Throat Surgery and Allergy," there is no mention of

serous otitis media, which is not uncommon in children and is a difficult treatment problem for both the allergist and the otolaryngologist. Also in this chapter, in the section on x-ray studies, there is no mention of a lateral soft tissue x-ray study of the nasopharynx for lymphoid (adenoid) tissue. This film may be helpful in evaluating the allergic patient with nasal obstruction, and should prevent adenoidectomy in the undiagnosed agammaglobulinemic patient who is having chronic or recurrent middle ear and sinus infections.

Despite the minor defects mentioned above, I recommend this book with enthusiasm to surgeons, pediatricians, internists and also to allergists. There is much good information, palatably presented, in this volume.

CAROLYN C. HUNTLEY, M.D.

Lasers in Medicine. By Leon Goldman, M.D., and R. James Rockwell, Jr. 385 pages. New York: Gordon and Breach Science Publishers, 1972.

With the advent of collimated, coherent light and microwave irradiation (lasers and masers), numerous applications to medicine were immediately suggested. To date, however, these devices have not been applied extensively to any branch of medicine, with the possible exception of eye surgery. With further medical research and the impending refinements in laser techniques, the bio-application of collimated light is certain to occupy a more respected position in clinical medicine.

Serious researchers who wish to apply lasers to a biological problem will find a rigorous mathematical

treatise of laser technology sufficient for a proper understanding of the subject. A prerequisite, however, is a working knowledge of calculus and modern physics on the part of the reader. For this reason, most practicing physicians will find the majority of the text inappropriate for obtaining a cursory background in the laser and its clinical applications. Current clinical usage of the laser is presented in only the last 79 pages, of which approximately half are consumed with photography of mediocre to poor quality. Texts on the medical applications of the laser, and likewise research utilizing unique and innovative approaches, continue to be needed.

PHILLIP M. HUTCHINS, PH.D.

In Memoriam

Coy Cornelius Carpenter, M.D.

WHEREAS, it is recognized that Coy Cornelius Carpenter, M.D. was an extraordinary man, whose goals were lofty and whose achievements were great; distinguished as a pathologist, teacher and administrator, he also was a true builder in medical education; and

WHEREAS, he was endowed with the wisdom and optimism that enabled him to look at a small two-year medical school in rural Wake County and see its future growth to prominence among American medical colleges; and

WHEREAS, through tireless effort, vigorous leadership and sheer courage, he made this vision become a reality as he engineered the school's move to Winston-Salem and its establishment as the Bowman Gray School of Medicine, despite heavy odds that the venture would result in financial catastrophe; and

WHEREAS, he devoted 41 years of his life to this medical school, serving under four Wake Forest presidents as professor of pathology, dean and vice president for medical affairs; and

WHEREAS, he was a leading force in the development of the Bowman Gray School of Medicine into a center of inestimable value to North Carolina in the training of physicians, in research, and in ministering to human ills and infirmities; and

WHEREAS, while the Bowman Gray School of Medicine stands as his monument, he was vitally interested in every sector of Wake Forest University; instrumental in paving the way for the move of the institution to Winston-Salem and continuing to take an active part in university affairs until the day of his death; and

WHEREAS, his energies diminished neither by retirement nor three serious encounters with heart disease, he turned to writing and had his first book, *The Story of Medicine at Wake Forest University*, published in 1970; and

WHEREAS, he was a stalwart Baptist and a devoted husband and father, whose friends will remember him for his warmth and contagious gaiety; and

WHEREAS, he was a man of great deeds, whose contributions have benefitted and will continue to benefit countless lives throughout the community, the state and the nation; now therefore be it

Resolved, that in a spirit of thankfulness and respect for the life of Coy Cornelius Carpenter, M.D., we, the Forsyth County Medical Society, make this expression of our esteem a part of the permanent records of this, the Forsyth County Medical Society, and that a copy be sent to the North Carolina Medical Society and to his family with our deepest sympathy.

Verling K. Hart, M.D.

Dr. Verling K. Hart was born at Fort Francis E. Warren, Wyoming, June 12, 1894. His father was the first graduate of West Point from the State of Wyoming.

Dr. Hart's premedical work and first three years of medicine were done at the University of Colorado. He graduated from the University of Pennsylvania Medical School in 1921. In 1923 he received the Master of Science degree for work done at the Graduate School of Medicine at the University of Iowa. He also did postgraduate work at the University of Pennsylvania in 1927 and in Vienna, Austria in 1930.

Dr. Hart became associated with the Charlotte Eye, Ear, Nose and Throat Hospital in 1928, later becoming part owner. Also in 1928 he was married to the former Miss Noel Pridgen of Elm City, who survives.

In 1936 he was awarded the Moore County Award for the best paper read before the State Medical Society. He was president of the Charlotte Rotary Club in 1937. He played a leading role in the build-

ing and development of Charlotte Memorial Hospital, and headed for eight years the Ear, Nose, and Throat Department there. He served as president of the Mecklenburg County Medical Society in 1948-1949. He was a past president of the North Carolina Eye, Ear, Nose and Throat Society and a past president of the State Medical Society. He was a member of the Board of Directors and vice president of Hospital Saving Association, and was a member of the National Blue Shield Commission.

Dr. Hart was the author of numerous articles in local and national medical journals. He was president of the Broncho-Esophagological Association in 1959, Honor Guest of the Association in 1965, and in 1968 received the Chevalier Jackson Award for Outstanding Achievement and Accomplishment in bronchoesophagology.

The Distinguished Senior Alumnus Award was given him by the University of Pennsylvania School of Medicine in 1971.

Dr. Hart belonged to all the appropriate medical societies and was past president of most of them. Impressive as his professional accomplishments were, they pale before the personal traits and accomplishments. His sincere interest in young doctors was felt and known by practically every young doctor, regardless of specialty, who came to Charlotte during his active years. Within his specialty, he knew no competitors—only colleagues; and few men in his specialty are not indebted to his kindness and counsel.

With his patients he was doctor and friend. His compassion was limitless, and his genuine concern not only for the health of his patient, but for his welfare and well-being was all too well known. His colleagues often chided him for being "taken," to which he would reply, "I don't mind being taken as long as I never miss an opportunity to help someone in need."

Dr. Hart was blessed with a great sense of humor. Particularly when troubles beset him, he found humor and invited all to laugh at him and with him. No one ever heard him complain, and when failing health forced his retirement, though this was the bitterest blow he could suffer, he responded with a joke on himself.

Dr. Hart was without guile. He was incapable of

thinking evil or doing evil, and could never believe that anyone else could. Medicine and people were his great love, and he gave generously of his talent, his time, and the abundant love within him to all.

His departure leaves a void in the medical fraternity. He will always be remembered as a true Christian gentleman, a beloved physician, and one of God's noble creatures.

MECKLENBURG COUNTY MEDICAL SOCIETY

Stanley Stewart Saunders, M.D.

Stanley Stewart Saunders died October 24, 1971 at the age of 75, less than 48 hours after suffering a heart attack.

This pioneer pediatrician practiced in High Point from 1926 until his retirement in 1963. During this time he brought in other associates to form the Infant and Child Clinic.

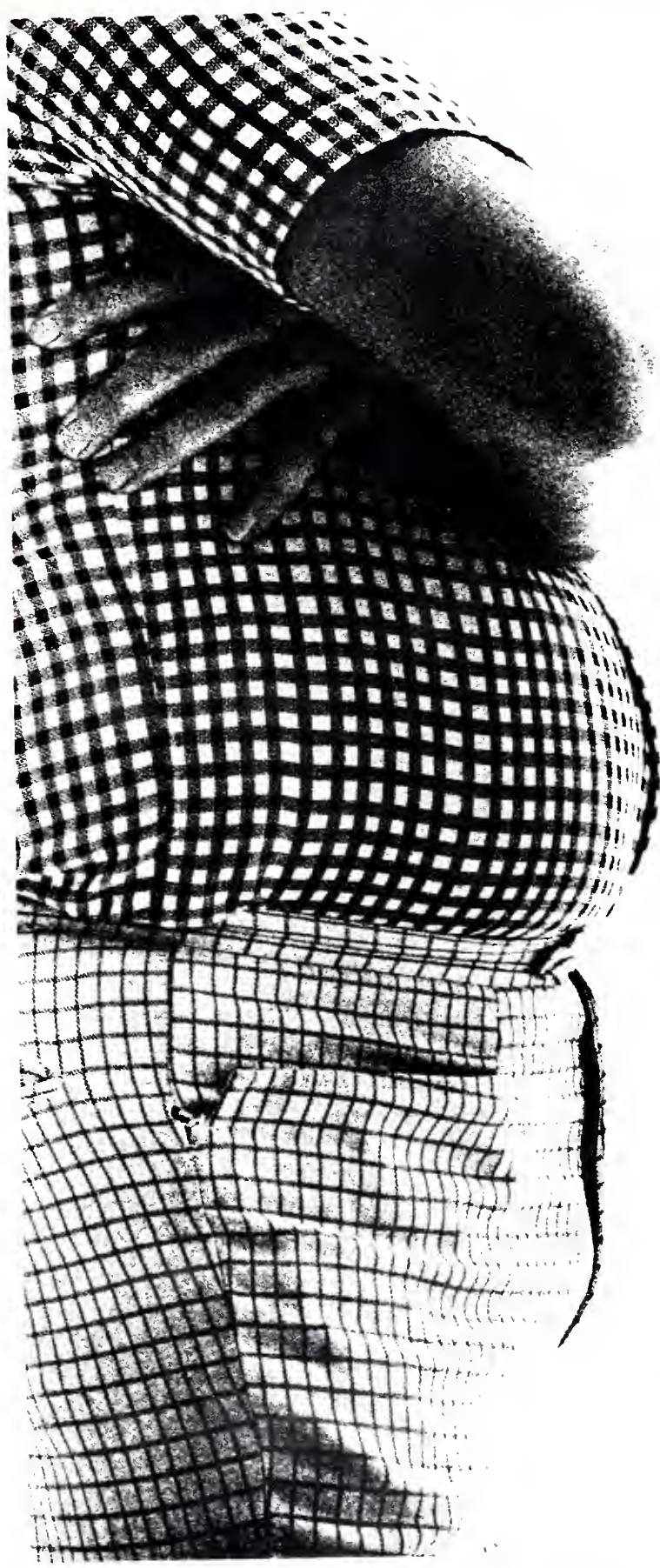
He was born January 12, 1896, in Clinton, N. Y., a son of Samuel J. and Jennie Stewart Saunders. He was truly an educated gentleman. He was a graduate of Clinton High School, Oakwood Collegiate Institute, a Phi Beta Kappa graduate of Hamilton College and an A.O.A. graduate of Harvard Medical School, and he served his internship and residency at Boston City Hospital. His medical training came after World War I, in which he served in Europe as a sergeant in a field hospital and a base hospital. On June 21, 1924, he was married to the former Rose Mills. She survives at her home, 1322 Greenway Drive. Also surviving are a son, Stanley S. Saunders of Atlanta, Ga.; a daughter, Mrs. Scott James, of Bennettsville, S. C.; and four grandchildren.

He was a charter member of the N. C. Pediatric Society. He was a member of the American Academy of Pediatrics and was certified by the American Board of Pediatrics. He was a member of the American Medical Association, Medical Society of the State of North Carolina, and the Guilford County Medical Society.

These are the factual data. He was indeed an excellent clinician who loved his patients and whose patients loved him. To everyone he brought joy and happiness with his ever-present smile and ready wit. He lived a full and happy life and departed quickly as he would have wished.

GUILFORD COUNTY MEDICAL SOCIETY

The fast remedy which we shall mention in [gleet] is a cold bath, than which, there is not perhaps a more powerful bracer in the whole compass of medicine . . . the patient ought to plunge over in water every morning fasting, for three or four weeks together. He should not stay long in the water, and should have his skin dried as soon as he comes out.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 342.



What a waste.

A waste of millions of Americans who stuff themselves with more food than they need.

And boost the risk of serious illness in the process.

The recent White House Conference on Food, Nutrition and Health urged us all to confront this aspect of America's nutrition crisis.

National Dairy Council is confronting it.

Supported by the dairy industry, we sponsor desperately-needed research projects to help us learn more about nutrients, their functions, and effects on the human being.

The vast American waistland.

We provide program assistance, nutrition information and a communications materials program for people like you who can directly influence what—and how much—Americans eat and drink.

And most important, we maintain a dedicated, highly-professional staff of people who search for the truths in nutrition research and education. And never settle for anything less.

The vast American waistland.

National Dairy Council is helping to shrink it down to size.

NORTH CAROLINA

DAIRY COUNCILS

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
DECEMBER 1971 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries Jan. 1971 - Dec. 1971	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths	Total Deliveries Jan. 1971 - Dec. 1971	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths	Total Deliveries Jan. 1971 - Dec. 1971	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths	Total Deliveries Jan. 1971 - Dec. 1971	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths	Total Deliveries Jan. 1971 - Dec. 1971	Perinatal Rate Per 1,000 Deliveries				
	December 1971	January 1971 - December 1971																December 1971	January 1971 - December 1971	December 1971	January 1971 - December 1971
NORTH CAROLINA	152	1781	68167	26.1	86	1275	29047	43.9													
ALAMANCE	2	38	1236	30.7	2	15	433	34.8	PENDER		2	146	-	1	3	144	-				
ALEXANDER	1	15	320	46.9			1	35	PERQUIMANS		2	72	-			58	-				
ALLEGHANY		2	112	-				6	PERSON		6	275	27.8		11	224	49.1				
ANSON	1	6	190	31.6		15	281	53.4	PITT	2	20	668	29.9	3	19	670	28.4				
ASHE	1	10	301	33.2			2	-	POLK		2	137	-		1	28	-				
AVERY	1	12	245	49.0			1	-	RANDOLPH	2	41	1251	32.8	1	9	116	77.6				
BEAUFORT	3	12	411	29.2	1	14	247	56.7	RICHMOND	1	13	457	28.4		12	288	41.7				
BERTIE	1	8	86	-		11	235	46.8	ROBERTSON		15	637	23.5	5	69	1632	42.3				
BLADEN	1	6	234	25.6	2	8	212	37.7	ROCKINGHAM	2	37	980	37.8	2	23	413	55.7				
BRUNSWICK		5	362	13.8	2	8	171	46.8	ROWAN	2	26	1184	22.0	1	16	329	48.6				
BUNCOMBE	7	64	1998	32.0	3	19	283	67.1	RUTHERFORD	3	26	717	36.3		5	153	32.7				
BURKE	2	26	1025	25.4	1	8	82	-	SAMPSON		3	440	-		19	353	53.8				
CABARRUS	1	19	997	19.1		8	309	25.9	SCOTLAND	1	11	321	34.3		11	307	35.8				
CALDWELL	2	23	1103	20.9		3	107	-	STANLY	2	16	650	24.6		1	7	123				
CAMDEN		4	59	-			34	-	STOKES		7	370	18.9		1	3	64				
CARTERET		15	547	27.4			85	-	SURRY	4	32	857	37.3		2	58	-				
CASWELL	3	9	147	61.2	4	10	166	60.2	SWAIN			123	-		1	65	-				
CATAWBA	2	46	1536	29.9		7	229	30.6	TRANSYLVANIA	1	14	294	47.6			31	-				
CHATHAM	1	12	358	33.5		9	172	52.3	TYRRELL		1	25	-		3	35	-				
CHEROKEE		7	267	26.2	1	11	-	-	UNION	2	20	805	24.8	1	23	338	68.0				
CHOWAN		3	93	-		4	107	-	VANCE	1	6	326	18.4	3	16	350	45.7				
CLAY		3	76	-				-	WAKE	5	79	3057	25.8	5	42	1105	38.0				
CLEVELAND	1	37	1018	36.3	1	12	402	29.9	WARREN		3	76	-		7	172	40.7				
COLUMBUS	3	18	564	31.9	1	11	376	29.3	WASHINGTON		2	128	-		15	140	107.1				
CRAVEN	5	34	1196	28.4	2	20	386	51.8	WATAUGA		11	359	30.6		1	6	-				
CUMBERLAND	9	78	3826	20.4	4	70	1615	43.3	WAYNE	3	32	1173	27.3		27	631	42.8				
CURRITUCK		1	68	-			37	-	WILKES	1	31	849	36.5		4	69	-				
DARE		3	94	-			9	-	WILSON		12	503	23.9		2	15	528				
DAVIDSON	2	41	1568	26.1	2	17	246	69.1	YADKIN	2	10	371	27.0			23	-				
DAVIE		8	311	25.7	2	2	65	-	YANCEY		5	201	24.9			1	-				
DUPLIN		8	416	19.2	1	12	301	39.9	Cities City totals are also included in county totals												
DURHAM	2	39	1372	28.4	2	41	935	43.9	ALBEMARLE		2	148	-		1	34	-				
EDGEcombe	1	8	426	18.8		21	515	40.8	ASHEBORO		5	205	24.4			27	-				
FORSYTH	5	53	2620	20.2	2	39	1218	52.0	ASHEVILLE	4	24	631	38.0	3	17	257	66.1				
FRANKLIN		3	190	-	2	15	250	60.0	BURLINGTON		15	495	30.3		6	150	40.0				
GASTON	5	64	2618	24.4	1	20	477	41.9	CHAPEL HILL	1	9	279	32.3		2	65	-				
GATES		1	56	-		2	74	-	CHARLOTTE	4	56	2897	19.3	3	90	2069	43.5				
GRAHAM		2	107	-			9	-	CONCORD		6	203	29.6		4	127	-				
GRANVILLE	3	12	210	57.1	1	23	326	70.6	DURHAM	2	23	833	27.6	2	36	833	43.2				
GREENE	2	6	87	-	1	10	129	77.5	EDEN		10	199	50.3	1	3	60	-				
GUILFORD	8	89	3596	24.7	2	74	1675	44.2	ELIZABETH CITY	2	4	111	-		1	97	-				
HALIFAX	13	407	31.9	3	32	593	54.0	FAYETTEVILLE	1	18	1007	17.9	3	41	614	66.8					
HARNETT	13	631	20.6	4	27	306	88.2	GASTONIA	2	26	765	34.0	1	10	234	42.7					
HAYWOOD	4	21	686	30.6	1	17	-	GOLDSBORO	1	10	290	34.5		12	269	44.6					
HENDERSON	1	24	687	34.9		47	-	GREENSBORO	6	45	1755	25.6	2	48	1071	44.8					
HERTFORD			141	-	16	259	61.8	GREENVILLE	1	10	275	36.4	1	7	199	35.2					
HOKE	1	3	122	-	11	237	46.4	HENDERSON		2	149	-		1	7	151	46.4				
HYDE	1	4	43	-	3	56	-	HICKORY		11	310	35.5		2	112	-					
IREDELL	26	949	27.4	12	339	35.4	-	HIGH POINT		22	783	28.1		19	423	44.9					
JACKSON	4	8	279	28.7	3	63	-	JACKSONVILLE	2	11	411	26.8		1	2	74	-				
JOHNSTON	1	17	794	21.4				KINSTON	1	7	262	26.7		1	16	239	66.9				
JONES			87	-	3	97	-	LENOIR	1	3	187	-			2	49	-				
LEE	9	427	21.1	8	191	41.9	-	LEXINGTON	1	13	264	49.2		5	90	-					
LENOIR	2	18	579	31.1	1	30	452	66.4	LUMBERTON		5	218	22.9		9	202	44.6				
LINCOLN	2	17	570	29.8		3	115	-	MONROE		1	135	-	1	9	100	80.0				
MCDOWELL	2	12	520	23.1	1	54	-	MORGANTON		7	134	52.2		2	27	-					
MACON		3	219	-		5	-	NEW BERN		6	166	36.1		7	134	52.2					
MADISON	2	12	235	51.1		3	-	RALEIGH	4	44	1434	30.7	5	31	586	52.9					
MARTIN		3	217	-	2	9	249	36.1	REIDSVILLE		3	156	-	8	104	76.9					
MECKLENBURG	5	86	4680	18.4	4	102	2391	42.7	ROANOKE RAPIDS		6	199	30.2	1	3	37	-				
MITCHELL		6	220	27.3		1	-	ROCKY MOUNT E		1	111	-		5	130	44.4					
MONTGOMERY	2	4	242	-	2	8	119	67.2	ROCKY MOUNT N		3	234	-		5	95	-				
MOORE	1	16	459	34.9		11	261	42.1	SALISBURY		2	189	-	1	6	137	43.8				
NASH	1	8	603	13.3		13	507	25.6	SANFORD		4	162	-		4	81	-				
NEW HANOVER	2	36	1276	28.2		18	455	39.6	SHELBY		9	177	50.8		2	108	-				
NORTHAMPTON	1	2	100	-	2	14	321	43.6	STATESVILLE		7	227	30.8		5	170	29.4				
ONSLow	7	54	2486	23.9	2	12	423	28.4	THOMASVILLE	1	7	205	34.1	2	9	89	-				
ORANGE	2	17	769	22.1	1	17	229	74.2	WILMINGTON	1	21	575	36.5		18	369	46.3				
PAMLICO		2	84	-		2	70	-	WILSON		7	250	28.0		1	6	234				
PASQUOTANK	2	9	257	35.0	4	166	-	WINSTON SALEM	3	26	1240	21.0	2	37	1156	32.0					

¹ Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

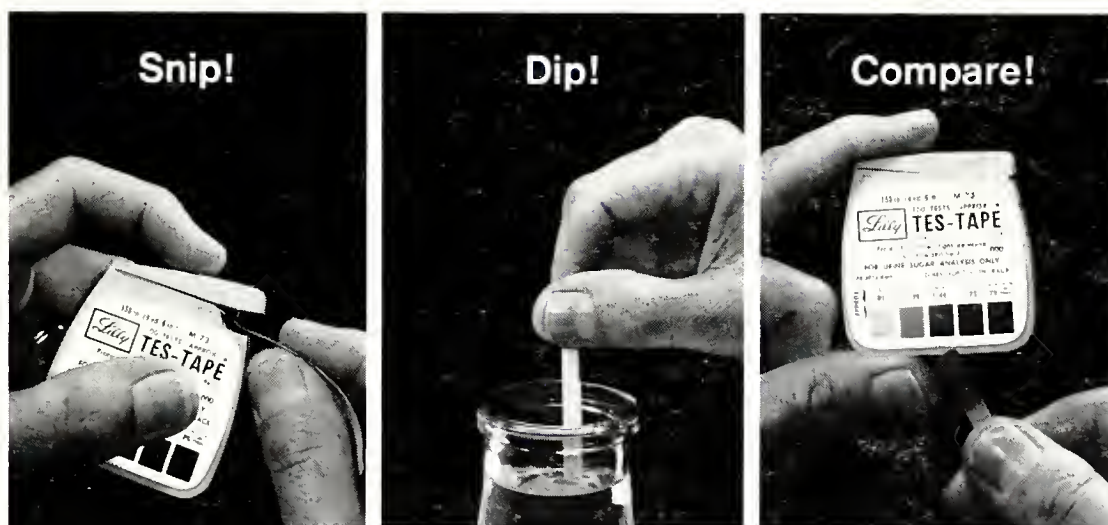
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NORTH CAROLINA

Medical Journal

IN THIS ISSUE: Kidney Transplantation in a Community Hospital, Donald C. Mullen, M.D., Robert D. Ensor, M.D., Charles D. Farmer, M.D., James H. Black, M.D., Orin T. Finklea, M.D., William R. Story, M.D., Harry K. Daugherty, M.D., and Francis Robicsek, M.D.; Principles in the Management of Contaminated Arterial Wounds and Infected Arterial Prostheses, William A. Gay, Jr., M.D.; Polycystic Liver Disease with Chemical Analysis of the Cyst Fluid, Ralph W. Bland, M.D., John C. Compton, M.D., and James A. Maher, M.D.; Complications of Tetracycline Therapy for Acne, Robert S. Gilgor, M.D.

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What it means to live and work in Tipton County, Tennessee

**Persons who are white and
over 40 have one chance in four
of having solar keratoses...
which may be premalignant**

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

**Prevalence of solar keratoses in white persons
over 40 in Tipton County, Tennessee**

Female	159	44
Male	117	66

☐ Persons without solar keratoses ☒ Persons with solar keratoses

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.





PRESIDENT'S NEWSLETTER

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

No. 11

April 5, 1972

American Society of Internal Medicine Board of Trustees and American College of Physicians Board of Regents have reached points of agreement for merger of the two large societies. In joint announcement presidents of the two organizations said, "It has now become obvious that we cannot separate educational activities from social and economic factors and that the strengths of both societies are needed if they are to become leaders and spokesmen for internal medicine."

Fourth Annual Allied Health Post-Graduate Course in Diabetes at Vanderbilt University Medical School, April 17 - 19, 1972. Physicians are encouraged to send allied health professionals for instruction in methods of aiding physicians in the care of diabetes mellitus.

Conference on Computers and Business Machines in Medical Practice at Medical Society Headquarters, March 30, 1972, had sixty or more registrants. The talks were excellent, instructive, and followed by numerous questions. Cost problems in computer programs for offices are great but in the long run should increase efficiency.

Emergency Medical Services Conference for one day, April 19, at Sheraton Inn in Winston-Salem and April 20 at Holiday Inn in Raleigh. Hospital personnel, allied health workers, and physicians will participate.

AMA called for removal of discriminatory wage-price control restrictions being imposed upon physicians. Suggested language on checks in payment of physicians' fees and entries on such forms as used in Medicare appear to be quite discriminatory also.

In Philadelphia Small Claims Court two cases have been considered in regard to liability for unpaid hospital bills. In one instance the physician was held liable for \$500 and in the second instance Blue Cross was held liable for \$344. Each case has been appealed. This emphasizes need for physicians through their own utilization committees to make decisions in regard to utilization at the time and place where questionable utilization occurs. Various utilization committees operating in hospitals in particular and in nursing homes should challenge any decision made by party or parties after the fact. Local utilization committees have the opportunity to

discuss problems with physicians in charge and with the nursing services. It is very difficult to make accurate or satisfactory decisions based on a cold discharge summary.

President Nixon is stepping up administrative development of contract practice arrangements (HMO's). Currently an estimated 500,000 Medicare beneficiaries and 235,000 Medicaid beneficiaries are enrolled in experimental contract practice groups. Representative Wilbur Mills stated that the three ingredients for National Health Insurance should be 1) expanded benefits for the poor under Medicaid, 2) insurance protection for middle income Americans, and 3) protection against catastrophic illness.

Senate Finance Committee took disastrous step of including tentatively chiropractic services under Medicare at estimated cost of \$100,000,000.

The overcharge article by the reporter from the Washington Bureau of Associated Press was obviously a misinterpretation of Blue Cross and Blue Shield's Insurance programs based on the usual, customary, and reasonable charge. The fact that Blue Shield does not pay the full bill of a physician does not mean that the physician has made an overcharge. Furthermore bills are commonly rendered in which items are not covered in the insurance package. The accumulated non-covered services were considered by the reporter as an overcharge. So far as I know Blue Shield has never increased the payment to a physician with a very low profile. North Carolina Blue Cross and Blue Shield has released a statement in explanation of this news article and previously an explanation of the discrepancies of the article were made by me at a Guilford County Medical Society meeting.

Cherry Hospital State Bureau of Investigation report was studied at length. No member of the Medical Society was guilty of illegal or unethical conduct.

Committee on Third Party Payors will develop manual on technique of dealing with third parties for use by physicians and medical assistants.

Senator and Representative at AMA-AMPAC Washington meeting round-table each passed up a simple question in regard to health care. Each considered himself unqualified to answer. It will be interesting to see how they vote intelligently on the complex issues.

Mr. Stephen C. Morrisette, a native of Elizabeth City, has recently been employed by the Medical Society as a field representative to begin work May 1, 1972. He is currently employed as a teacher consultant in the Bertie County Schools.

Best wishes and

Sincerely yours,

Charles W. Styron
Charles W. Styron, M. D.
President

Kidney Transplantation in a Community Hospital

Donald C. Mullen, M.D.; Robert D. Ensor, M.D.; Charles D. Farmer, M.D., James H. Black, M.D.; Orin T. Finklea, M.D.; William R. Story, M.D.; Harry K. Daugherty, M.D.; and Francis Robicsek, M.D.

THE estimated number of deaths from kidney disease occurring annually in the United States is between 30,000 and 40,000, and in North Carolina alone the figure approaches 1,000. The majority of these victims die without having had the benefit of chronic dialysis or the prospect of kidney transplantation. Until recently the small number of patients who did receive such treatment had to depend upon the university centers, which are not at present capable of accommodating all the potential recipients of kidney transplants. The Transplant Registry has recorded more than 3,700 renal transplants performed throughout the world during the past 15 years, half of which were obtained from living related donors and half from cadaveric sources.² One-year survival of patients receiving kidneys from living siblings now approaches 90 percent, and from cadavers 45 percent.³ Thus kidney transplantation has reached the stage of more general clinical application than heretofore.

The problems involved in successful transplantation have not been completely solved, but progress is being made continually. A refinement in tissue-typing techniques for the proper matching of donor with recipient has led to improved results in transplants from both living relatives and cadavers. Better methods of preservation and rapid transport of cadaveric kidneys have resulted in more widespread use of this source of organ procurement. More im-

munosuppressive therapy for the recipient of either type of transplant has improved the management of rejection crises. We will discuss each of these problems as they relate to Charlotte Memorial Hospital, a large community teaching hospital which for two years has had a dialysis unit for acute and chronic cases of renal disease, and a transplantation team to cope with this major medical problem.

FACILITIES AND STAFF

Our present hemodialysis unit has been in existence for two years. Two full-time nurses operate the two artificial kidney machines in the unit. A successful private fund-raising campaign was conducted to expand our facilities. Community support through the Kidney Foundation of Mecklenburg County has been vital in this area.

The transplantation team consists of several vascular surgeons, urologists, and renologists, all of whom are private practitioners in Charlotte. A member of each of these specialties who is familiar with renal transplantation is available at all times to handle any complications which may occur. Several members of the team have had experience with transplantation in university centers.

METHODS

Criteria

The criteria we have used in selecting potential recipients are consistent with those of other centers performing transplants. We arbitrarily set the age limits at 15 to 55 years, but exceptions are sure to arise. The patient must be in irreversible renal failure, have a short life expectancy, and be free of

From the Department of Thoracic and Cardiovascular Surgery, The Heineman Research Laboratory and Charlotte Memorial Hospital, Charlotte, N. C.

Reprint requests to The Sanger Clinic, P. A., 1929 Randolph Road, Charlotte, N. C. 28207 (Dr. Mullen).

major systemic disease and active infection. Any significant abnormality of the lower urinary tract must be corrected. One of the major criteria in selecting a recipient is his ability to adhere to a rigid medical regimen following transplantation. Since there are no federal or private grants supporting these patients in the community hospital, their financial status must be considered. Most patients have insurance which will cover the hospital cost of transplantation (now ranging between \$3,000 and \$6,000). This expense must be compared with the cost of maintaining hemodialysis—approximately \$20,000 annually,⁵ although home units can be maintained for much less after an initial outlay by the family.

Dialysis

Most of the early dialysis in our cases was done with the use of the external arteriovenous Teflon-silastic shunt of the type developed by Scribner. More recently, however, an internal arteriovenous fistula created between the radial artery and an adjacent superficial vein in the wrist has been utilized. This procedure results in dilation of the superficial veins of the forearm to facilitate venopuncture. The external cannulas are much more cumbersome and uncomfortable for the patient, and frequently "clot off" after three to six months.

Tissue-matching

At the present time tissue-typing facilities are not available at Charlotte Memorial Hospital. The program would not have been possible, therefore, without the cooperation of the Duke University Medical Center transplantation laboratory and the inclusion of Charlotte in the Southeastern Regional Cadaveric Transplant Program.

In 1969 six major regions of the United States were organized under the Kidney Disease Program, a part of the Regional Medical Program Services of the Health Services and Mental Health Administration. The purpose was to encourage regional sharing of cadaveric kidneys. The use of computerized networks has made renal transplantation more available to tissue-typed recipients being maintained on chronic hemodialysis throughout the region. Therefore, the exchange of kidneys among the participating institutions within the region, together with more rapid means of transportation, has greatly enhanced cadaveric transplantation.

The Southeastern region involves most of the major centers between Baltimore and Atlanta. They include the following:

1. Baltimore (Johns Hopkins, Baltimore City)
2. Baltimore (University of Maryland)
3. Richmond (Medical College, Norfolk, D. C. General, Georgetown, George Washington)
4. Charlottesville (University of Virginia)
5. Durham (Duke University Medical Center,

University of North Carolina School of Medicine, Bowman Gray School of Medicine, Charlotte Memorial Hospital)

6. Atlanta (Emory University, Grady Memorial Hospital)

It is hoped that exchange among the other regions throughout the nation will eventually become a reality and that other community hospitals will be included.

When a patient is accepted into our program for cadaveric transplantation, blood for tissue matching is sent to Duke and the information obtained is computerized into the regional program. When a kidney which best matches our recipient becomes available within the region, we are notified and the recipient is prepared immediately. Likewise, if a donor becomes available in Charlotte, the same process is carried out and the kidney is transported to the patient in the region who best matches the donor.

Preservation of organs

The preparation and preservation of donor kidneys is essential to a successful transplant. The donors are usually young persons dying from traumatic head injury. It is important to determine that they have no history of renal disease, no active systemic infection, and no carcinomatosis. The pronouncement is always made by a physician who is not a member of the transplant team.

Immediately upon death the donor is taken to the operating room, and, through a transverse upper abdominal incision, both kidneys are removed and immediately perfused with Ringer's lactate solution that has been cooled to 40°C. A good kidney will become pale and the renal vein perfusate clear. The interval from the time of death until the kidneys are removed and perfused in the cold solution—known as the warm, ischemic time—is critical and should be held to less than an hour. The renal artery should be taken at its origin from the aorta, and the vein from its junction with the vena cava. The blood supply around the ureter as well as a good length of this structure should be carefully preserved. The kidney is then aseptically packed in a plastic intestinal bag, placed in an ice container, and either transplanted at our institution or transported to the recipient it best matches elsewhere in the region. The cold, ischemic interval—from the time of cooling to the time of revascularization—ideally should be held under six hours, but this period is less critical than the warm ischemic time. As long as 12 hours would be acceptable.

Surgery

The standard transplantation operation is then performed on the recipient. This is done by way of the extraperitoneal approach in the lower quadrant. Mannitol, 25 gm, is usually given intravenously at the time the vascular clamps are released. Nephrectomies have not been performed simultaneously on

any of our patients who have received cadaveric kidneys. Some patients have had their kidneys removed prior to transplantation and some after transplantation, and two patients who received kidney transplants from living related donors did have their kidneys removed simultaneously.

Following operation the patient should be kept in isolation and given antibiotics, since infection is the single most common complication and cause of death. Immunosuppressive therapy has consisted of three medications: azathioprine (Imuran), prednisone, and anti-lymphocytic globulin (ALG). Maintenance doses of 2 mg of Imuran per kilogram of body weight and 60 mg of prednisone daily are used. ALG, prepared from horse serum, has been given to all recipients of cadaveric kidneys during the first month postoperatively. Intramuscular doses of 5 cc per day are given for the first two weeks. This dose is tapered off and discontinued altogether at six weeks. In the event of threatened rejection, the steroids are increased up to 200 mg daily. Recently methyl prednisolone sodium succinate (Solu-Medrol) has been used in the early postoperative period and in instances of threatened rejection.

RESULTS

Since hemodialysis was started at Charlotte Memorial Hospital in 1968, 49 patients have been dialyzed 632 times. Of these 49 patients, 22 had acute renal failure and 26 were in chronic renal failure and awaiting renal transplantation, to be done either at Charlotte Memorial Hospital or elsewhere. Six of the patients have had renal cadaveric transplantation in Charlotte. Three have had transplants

from living related donors, and at present eight are awaiting transplantation while being maintained on hemodialysis. These cases are briefly summarized in the accompanying table.

We have encountered no vascular complications. A ureteral obstruction developed in one patient, and there was one wound infection and one wound hematoma. All kidneys eventually functioned and none has been rejected thus far, although it is still too early to evaluate long-term results. There have been two systemic cryptococcal infections, one causing our only death. Renal function remains at acceptable levels in all living patients, and no patient requires dialysis. Prednisone-induced Cushing's syndrome has been experienced by each of these patients, but in only one has it become severe. The general well-being of all the patients has remarkably improved.

Thus far we have sent ten kidneys from Charlotte to various hospitals in the region. At present we have eight patients on chronic dialysis who have been tissue-typed and placed on the regional computer waiting list for transplantation. We anticipate a need for 15 to 20 transplants yearly in the Charlotte area.

COMMENT

Although our program is in the developmental stage, our methods and results indicate the feasibility of such an undertaking in the larger community hospitals across the nation. The need for this development becomes obvious when the number of patients requiring extended care is realized. Regional programs, with improved communication and transportation between the cooperating hospitals, are making this program possible in institutions like Charlotte

Table 1
Summary of Cases

Patient	Diagnosis	Age, Sex, Race	Date of Transplant	Source of Kidney	Complications	Follow-up (Months)	Latest Serum Creatinine (Gm)	Status
1.	Congenital polycystic kidneys	35 WF	5-4-70	Cadaver (Atlanta)	Threatened rejection, 6 month post-op; responded to therapy	18	3.9	L&W
2.	End-stage kidney	23 WM	7-1-70	Cadaver (Durham)	Cryptococcal sepsis; responded to therapy	16	1.9	L&W
3.	Nephrosclerosis	30 CM	10-20-70	Cadaver (Durham)	Cryptococcal meningitis; death 2 months post-op	—	—	Died
4.	Chronic glomerulonephritis	24 WF	11-5-70	Cadaver (Charlotte)	None	12	1.3	L&W
5.	Chronic glomerulonephritis	30 CM	7-17-71	Cadaver (Baltimore)	Threatened rejection 3 weeks post-op; responded to therapy	4	3.2	L&W
6.	Chronic glomerulonephritis	30 WF	8-4-71	Living-related donor	Ureteral obstruction; required nephrostomy	3	0.9	L&W
7.	Nephrosclerosis	33 CM	8-5-71	Cadaver (Charlotte)	Hematoma incision	3	1.9	L&W
8.	Medullary cystic disease	23 WM	8-25-71	Living related donor	Post-op acute tubular necrosis, resolved	3	2.4	L&W
9.	End-stage kidney	38 WM	10-6-71	Living related donor	None	2	1.7	L&W

Memorial Hospital. The basic requirements of an artificial kidney—full clinical laboratory and blood bank facilities, efficient operating room and intensive care personnel, a cooperative hospital administration, and a team of physicians with experience in renal transplantation and the willingness to devote many hours of work beyond their regular practice—must all be met if the undertaking is to succeed.

It is recognized that the transplantation of organs from well matched *living related donors* offers the most effective treatment for end-stage renal disease.⁶ Good results are obtained in nearly 90 percent of these cases as compared with 45 percent in cadaveric transplants. So why not utilize living related donors for everyone who needs a kidney? The answer is obvious: Not everyone is fortunate enough to have a living relative who is not only willing to donate a kidney but also matches well. Well over half of the patients in chronic renal failure fall into this category, and as the number of siblings continues to decrease, as is now the trend, one would expect that most kidney transplants would have to be cadaveric in the near and distant future. When a well matched organ can be obtained from a willing sibling or parent, however, this is the procedure of choice.

Thus the rapid procurement and preservation of cadaveric kidneys becomes an important factor. It had been estimated that between 4,000 and 5,000 potential donors die in this country each year from head injuries and other causes. Educating the public as to the need for kidneys is necessary now and will be in the future, so that an understanding of the problems and techniques involved will become a part of the general knowledge of people in the community.

The passage of the Uniform Anatomical Gift Act by most of the states (41 as of mid-1970), allowing an individual to donate all or any part of his body for transplantation should increase the number of available organs if the public can be induced to participate in this project. (See the uniform donor card in

Fig. 1). Sadler and others have reviewed the legal implications of this law. Members of our team have been busy speaking at civic and church meetings in the hope of making known our problems and needs. The response has been gratifying.

Organ transplantation is now at the point that heart surgery was in 1955. We have passed from the stage of experimental surgery to that of accepted clinical application, and great things can be expected in transplantation not only of kidneys but of other organs such as the liver, lung, and heart. The problems of organ preservation and rejection are difficult but will eventually be solved. Their solution, together with the increased availability of organs, will greatly enhance the full clinical implementation of this new and fascinating field of surgery.

SUMMARY

1. The transplantation of six cadaveric kidneys and three kidneys from living related donors in a community is reported. No instance of rejection has occurred so far. One death from a systemic cryptococcal infection occurred after the patient was discharged from the hospital. There has been no vascular complication and only one urological complication.

2. The hemodialysis program and organization of the transplantation team are discussed.

3. With the great need for care, on the local level, of patients in chronic renal failure, the feasibility and implementation of treatment programs in the large community teaching hospitals holds great promise for the future.

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(c) _____ my body for anatomical study if needed.	
Limitations or special wishes, if any: _____	

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Figure 1

Principles in the Management of Contaminated Arterial Wounds and Infected Arterial Prostheses

William A. Gay, Jr., M.D.

CONTAMINATED vascular wounds and infections involving arterial prostheses present complex problems requiring a well planned surgical attack if loss of life or limb is to be averted. When these infections are not treated, the usual result is sudden, massive hemorrhage; therefore any therapy must be immediate and effective. The purpose of this report is to emphasize the principles underlying the management of these problems and to give examples of some types of surgical treatment.

ILLUSTRATIVE CASE

A 52-year-old woman was admitted to Duke University Medical Center in August of 1969 because of biopsy-proven squamous cell carcinoma of the vulva. Several days later a radical vulvectomy and bilateral inguinal node dissection were done. The tissue coverage over the femoral vessels was quite sparse following the dissection. Two weeks later, in the setting of an infection of the right groin, brisk hemorrhage from the right common femoral artery occurred. The bleeding was controlled by direct pressure, and 1,000 cc of whole blood was given. Because the right leg was cold and dusky and becoming anesthetic, an attempt at revascularization was felt to be indicated. It was feared that the groin infection extended beneath the inguinal ligament into the iliac area; therefore, a bypass graft using the obturator foramen technique¹⁻⁴ was considered unwise. The entire right half of the patient's body from ankle to neck was prepared for surgery and draped, and the contaminated inguinal area was excluded with a plastic film. An 8 mm knitted Dacron

prosthesis was then anastomosed to the right axillary artery in end-to-side fashion, tunneled subcutaneously around the lateral aspect of the right hip and the posterior aspect of the right thigh, and anastomosed, in similar fashion, to the right popliteal artery. The operative incisions were then closed and dressed. Next, the infected wound in the right groin was debrided and the common femoral artery doubly ligated with 2-0 nylon proximal and distal to the site of disruption. The groin wound was left open and with local care it healed well. One and one half years postoperatively the patient had no symptoms suggestive of arterial insufficiency of the right leg and was carrying on her activities normally. Pulses were excellent in the right foot, and arteriography (Fig. 1) showed the graft to be widely patent, filling the arteries of the leg both proximally and distally. It was planned to replace the prosthetic graft with an autogenous vein graft; however, this plan was abandoned because of recurrent malignant disease requiring local excision and subsequent radiation. Two years postoperatively the patient continues to have good pulses in the right leg.

DISCUSSION

This case is illustrative of the events which sometimes follow extensive surgery during which a major vessel is bared of its surrounding protective and supportive tissue. Once an area such as this becomes infected, the course is almost predictable. That is, the unprotected, unsupported artery, stripped of its nourishing adventitia and lying in an infected bed, will rupture and life-threatening hemorrhage will ensue. The same course is predictable for the infected arterial prosthesis. The prosthesis itself will usually resist the necrotizing effects of the infection, but the

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Fig. 1. Arteriogram taken 1½ years postoperatively shows patent graft filling the vessels of the right leg both distally and proximally.

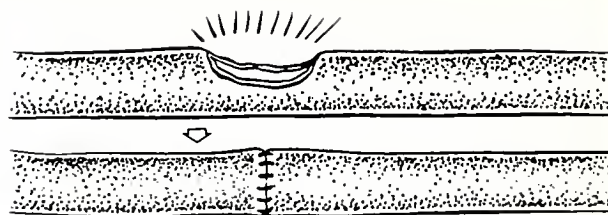
infection will eventually find its way to a suture line where necrosis and subsequent hemorrhage will result.

Proximal ligation of the artery away from the infected field, and in the case of the infected prosthesis, removal of the prosthetic material will prevent hemorrhage and allow the infection to clear. The resulting interruption of the blood supply to important distal parts may, however, lead to loss of life or limb. It behooves the surgeon, therefore, to be aware of the alternatives to ligation in the treatment of these patients.

Management

Several basic principles should be kept in mind in the management of all vascular problems involving contamination. First, with regard to the contaminated vascular wound (Fig. 2):

1. All foreign matter and devitalized tissue must be removed.
2. Vascular continuity without tension must be established.
3. Adequate tissue coverage must be supplied to the vessels.
4. Meticulous care must be given to the wound, avoiding extensive swelling or deep infection.

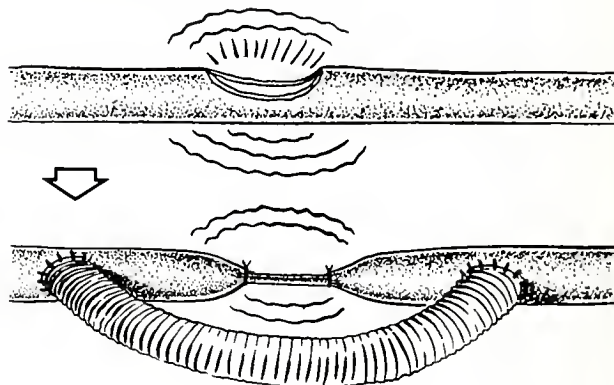


1. Remove foreign material and devitalized tissue.
2. Vascular continuity without tension.
3. Adequate tissue coverage.
4. Meticulous wound care.

Fig. 2. Principles of managing contaminated arterial injuries.

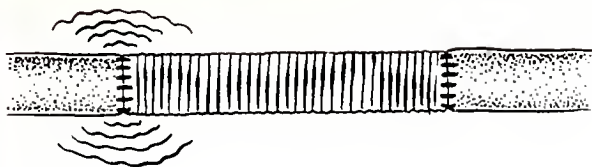
If these criteria cannot be met, or if there is already an established infection about the damaged artery, a bypass graft should be utilized. When using a graft (either of prosthetic, heterologous, homologous, or autogenous matter) to bypass an infected arterial wound, the following order of priority should be observed (Fig. 3):

1. Obtain hemostasis.
2. Prepare the area for clean incisions (excluding the contaminated field).
3. Perform bypass graft, avoiding the contaminated area.
4. Close the clean incisions.



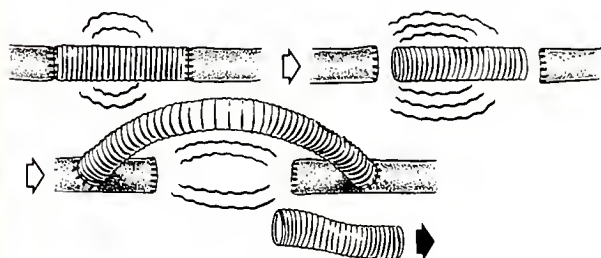
1. Obtain hemostasis.
2. Prep clean areas.
3. Bypass procedure avoiding contaminated area.
4. Close clean incisions.
5. Ligate infected vessels.
6. Wound care.

Fig. 3. Principles of managing infected arterial injuries using bypass graft.



1. Infected prosthesis must be removed.
2. Exposed prosthesis = infected prosthesis.
3. Rupture occurs at suture line.
4. Infection spreads faster in thrombosed graft.

Fig. 4. Principles of managing infected arterial prostheses.



1. Isolate and defunctionalize infected segment.
2. Exclude defunctionalized segment from clean field.
3. Restore vascular continuity with bypass graft.
4. Remove infected prosthesis and institute wound care.

Fig. 5. Principles of managing infected arterial prostheses using bypass graft.

5. Ligate the infected vessels, preferably out of the contaminated area.
6. Treat the contaminated wound with local measures.

Regarding the infected vascular prosthesis, several general statements can be made (Fig. 4):

1. An infected prosthesis must be removed.
2. An exposed prosthesis is infected.
3. Infection spreads to a suture line where rupture occurs.
4. Infection spreads faster in a thrombosed graft than in a patent one.

When removing an infected prosthesis the following steps should be taken (Fig. 5):

1. The infected segment of graft should be isolated and defunctionalized by division of the uninfected artery or graft proximally and distally through clean incisions.
2. The ends of the defunctionalized segment are then excluded from the clean fields.

3. Vascular continuity is restored by means of a bypass graft, and the clean incisions are closed.

4. The infected graft is removed and the area treated appropriately.

Infections involving vessels or vascular prostheses present problems peculiar to the site at which they occur. For example, an infected aortic bifurcation graft is associated with a very high mortality from the massive hemorrhage which inevitably occurs. The presence of this type of infection often makes itself known before the rupture occurs. These infections most commonly occur weeks or months after operation, and often present with signs of ureteral obstruction in addition to those of a smoldering infection. Treatment must be prompt once the condition is recognized, if life and limb are to be salvaged.

Several routes have been used successfully to detour blood to the lower extremities while removing the infected prosthesis⁶⁻¹⁰ (Fig. 6). Blaisdell and associates described the use of the descending thoracic aorta,⁶ and subsequently the use of the axillary artery⁷ as extra-abdominal sites for originating bypass grafts to the femoral artery in treating cases where aortic bifurcation prostheses had to be removed. Shaw,⁸ Veith,⁹ Wolf,¹⁰ and their co-workers have described various approaches to the upper abdominal aorta where bypass grafts could originate, then be tunneled extraperitoneally to a femoral artery. Wylie¹¹ has suggested turning up the iliac (external or internal) artery to bridge the vascular gap following removal of the prosthesis. He also recommended using catgut sutures for the anastomoses. Each of the aforementioned procedures usually requires a simultaneous femoral-to-femoral cross-leg graft to the opposite leg. All these techniques have been successfully applied; and the approach used in individual cases depends upon existing conditions.

Perhaps the most common site for infection of a prosthetic graft is the femoral area. In this location the condition is treated most easily by using a bypass graft from the ipsilateral iliac artery to a site in the femoral-popliteal system distal to the septic area. This area can be avoided by passing the graft through the obturator foramen (Fig. 7) and posteriorly to part of the adductor muscles.^{2, 12-14} Any and all prosthetic material in the area of infection must be removed, according to the principles already mentioned.

Procedures of this type are also useful in conditions other than infections, such as postirradiation fibrosis,¹ malignant diseases,^{2, 12} and high risk patients.⁷ Autologous tissues such as saphenous vein should be used for the bypass graft whenever possible. However, it has been erroneously assumed by many surgeons that saphenous vein autografts can be placed in infected areas. Necrotizing infections can, and do, destroy the wall of the autograft, possibly leading to massive hemorrhage.^{3, 15-17} Simi-

larly, arterial homografts, regardless of the method of preservation, may also be digested by bacterial infections. It is preferable, therefore, to avoid infected areas with all vascular conduits and to utilize a bypass graft originating in a clean field, passing through clean areas, and terminating in a clean field.

SUMMARY

A recent case of iliofemoral sepsis with rupture of the common femoral artery successfully treated with a bypass graft from the ipsilateral axillary artery to the popliteal artery has emphasized the vigor with which such cases must be approached. The principles of managing contaminated arterial problems are reviewed and several common applications are mentioned.

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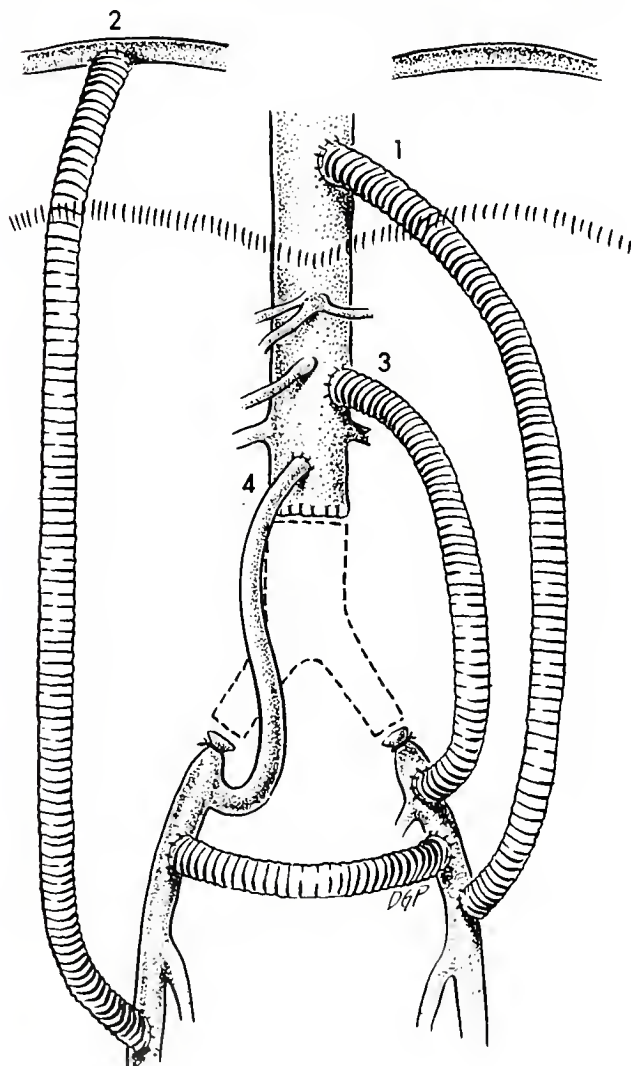


Fig. 6. Examples of methods of bypassing infected aortic bifurcation grafts (see text). (1) Thoracic aorta to femoral artery; (2) axillary to femoral artery; (3) upper abdominal aorta to femoral artery (extraperitoneally); (4) turn up of autologous hypogastric artery.

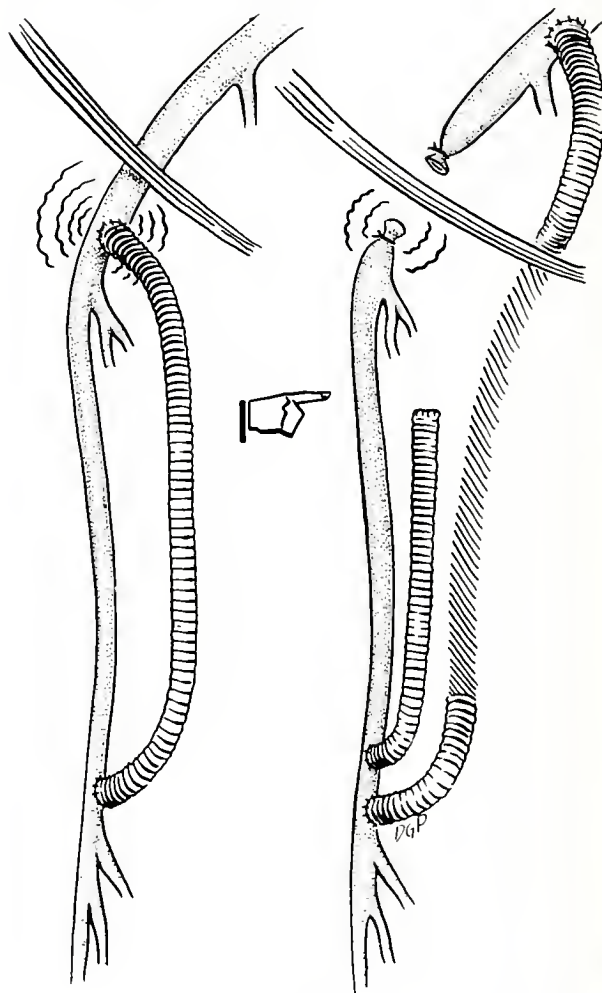


Fig 7. Diagrammatic representation of the obturator bypass technique.

Polycystic Liver Disease with Chemical Analysis of the Cyst Fluid

Ralph W. Bland, M.D., John C. Compton, M.D., and James A. Maher, M.D.

POLYCYSTIC disease of the liver has long been recognized as a rare cause of hepatic enlargement.^{1, 2} Until the advent of radioisotopic methods for scanning the liver, the condition was usually diagnosed at surgery or necropsy.^{1, 3} In a case seen recently at the Wayne County Memorial Hospital, a liver scan with technetium sulfur colloid allowed us to diagnose this disease and to obtain some of the cyst fluid for chemical analysis prior to surgery.

CASE REPORT

History

The patient, a 33-year-old white woman, was first seen in February, 1968, because of a suspected abdominal mass. She was asymptomatic at this time and physical examination revealed nothing of significance. When she was next seen, in January, 1969, a definite mass of undetermined etiology was present in the right upper quadrant. This was palpated best by a hand on the posterior and anterior right lateral abdominal walls. Her only complaint at that time was occasional colicky pain in the right side of the abdomen. She had never had diarrhea associated with the pain. Because of the palpable abdominal mass, she was admitted for evaluation to the Wayne County Memorial Hospital. The accessory clinical findings included a normal hemogram and urinalysis. The blood urea nitrogen was 11.5 mg/100 ml. The fasting blood sugar was 101 mg/100 ml. A cholecystogram was negative. The upper gastrointestinal series, small bowel series,

and barium enema disclosed no abnormalities. The intravenous pyelogram indicated good function of both kidneys, with moderate ptosis of the right kidney without obstruction to the ureter. Because the palpable abdominal mass corresponded beautifully with the findings of the intravenous pyelogram, we believed the mass we were feeling was a ptosed right kidney. The patient was discharged to return home to the care of her family physician.

She was next seen in this hospital in February, 1971. At that time she reported that her waist measurement had increased from 26 to 30 inches, despite the fact that she had lost 5 to 6 pounds. During the summer of 1970 she had an acute attack of upper abdominal pain while eating. An upper gastrointestinal series made at this hospital was again reported as negative. In the interval since that attack, she had no further abdominal pain except during a minor episode of gastroenteritis.

The patient's alcohol consumption was limited to occasional social drinks, and she had no history of hepatitis. The only medications she took were birth control pills. Her health had always been good. There were no known familial diseases. The patient is married and has three children living and in good health. Her husband had viral pericarditis many years ago, but this had apparently subsided without sequelae.

Physical examination

Physical examination showed a well developed, well nourished white woman in no acute distress. Examination disclosed no significant abnormalities except for the presence of an abdominal mass extending from the right costal margin in the mid-clavicular line almost to the iliac crest. On pres-

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Table
Results of Chemical Analysis on the SMA 12/60
 (Values per 100 ml. unless otherwise specified)

Test	Blood Serum	Cyst Fluid
Calcium	9.5 mg	2.1 mg
Inorganic phosphorus	3.8 mg	Negligible
Glucose	100.0 mg	2.0 mg
Urea nitrogen	13.5 mg	13.0 mg
Uric acid	3.0 mg	1.6 mg
Cholesterol	170.0 mg	20.0 mg
Total protein	7.0 gm	0.2 gm
Albumin	5.0 gm	0.1 gm
Total bilirubin	0.7 mg	0.1 mg
Alkaline phosphatase	45.0 mU/ml	< 5.0 mU/ml
Lactic acid dehydrogenase	170.0 mU/ml	0
Glutamic pyruvic transaminase	37.0 mU/ml	6.0 mU/ml

sure this mass could be palpated on the posterior abdominal wall and was felt to be almost ballotable. The enlargement extended well across the mid-line to the left costal margin. No nodules were palpable within the mass and there was no umbilical hernia. Results of the remainder of the physical examination were within normal limits.

Accessory clinical data

On admission, the urinalysis and complete blood count showed nothing abnormal. Two hours after a meal a sample of serum was obtained for analysis on the SMA 12/60; the results are shown in the table. An Australian antigen test and serologic test for syphilis were negative.

An intravenous pyelogram showed good function of both kidneys, with downward and medial displacement of the right kidney. A liver scan made with technetium sulfur colloid showed good uptake of the radioactive material in the liver, which was considerably enlarged. Multiple large "cold" areas were seen in the right lobe of the liver and in the region of the left lobe (Figs. 1 and 2). These were

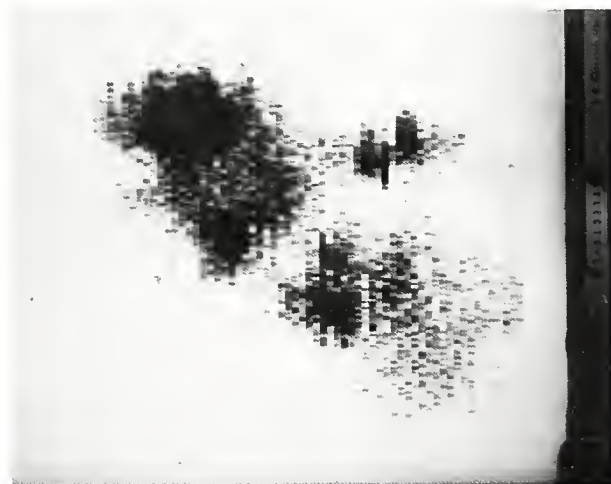


Fig. 1. Right lateral liver scan made with technetium sulfur colloid, showing extensive distortion of the parenchyma by the cysts.

interpreted as cysts, and percutaneous aspiration of one of the larger lateral cysts was performed.

When the needle entered the cyst, the fluid flowed with a steady drip, much the way spinal fluid flows when it is under normal pressure. Thirty milliliters of clear, colorless fluid of very low viscosity was obtained for analysis. The specific gravity was 1.330, and no precipitate was visible after centrifugation. Microscopic examination of the centrifuged fluid showed no cells, bacteria, or parasites. The fluid contained 147 mEq of sodium, 9 mEq of potassium and 125 mEq of chlorides per liter. The fluid was also analyzed on the SMA 12/60, and the results are shown in the table. Routine cultures, acid-fast cultures, and fungus cultures were all negative.

Findings at aspiration

Laparotomy performed one week later revealed polycystic liver disease with some cystic involvement of the right kidney (Figs. 3 and 4). The liver was found to contain literally thousands of cysts, some in grape-like clusters and many scattered throughout the parenchyma of the liver. Some of the larger cysts were 8 cm. in diameter. Fluid was obtained from some of the liver cysts, and four biopsy specimens were taken from the liver to show various stages of the polycystic process (Fig. 5). One of the renal cysts was also removed for study. Palpation of the left kidney disclosed several small cysts; the pancreas and spleen appeared to be normal. Since



Fig. 2. Another right lateral liver scan showing multiple cysts.



Fig. 3. Photograph taken at laparotomy showing multiple small cysts on the anterior surface of the liver.

nothing could be accomplished by further surgery, the abdomen was closed.

Analysis of fluid from the hepatic and renal cysts yielded the same results as those obtained on the preoperative specimen.

Histologic examination

Histologic examination of the liver tissue showed multiple cysts with thin walls lined by a uniform cuboidal cellular lining (Fig. 6). Only in the smallest cystic spaces were the cells somewhat more prominent, and it was thought that some of these spaces might represent bile ducts which had been compressed by adjacent cysts. As the cysts expanded, hepatic lobules were markedly distorted (Fig. 7), but no destruction of the hepatic lobules was evident in the biopsy material. Bile canaliculi stained by the method of Luna and Ishak⁴ showed the cystic space to be lined by cells containing fairly large nuclei and scanty cytoplasm; these cells did

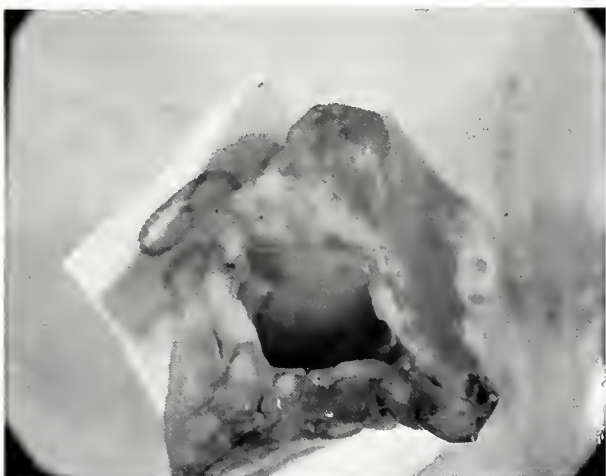


Fig. 5. Macro photograph of the liver biopsy specimen showing a cyst in the center surrounded by compressed hepatic lobules. Magnification x 10.



Fig. 4. Photograph taken at laparotomy showing two large and several smaller cysts within the kidney. The cystic liver is just above the kidney.

not show the fuchsinophilic characteristics of the normal bile canaliculi, and the contents of the cysts did not have the yellowish-green color of bile that has been stained by this method.

COMMENT

This case exhibits the typical features of polycystic disease of the liver and early polycystic disease of the kidneys. As in most of the cases reported previously,^{1, 3, 5} this patient's hepatic function was excellent despite the extensive cystic disease of the liver.

This is believed to be the first reported case in which fluid from the hepatic cysts has been analyzed chemically. Most authors^{1, 6} attribute these cysts in the so-called intralobular or intrahepatic bile ducts. The chemical composition of the fluid, however, suggests that there is probably only a passive transfer of fluid into the cystic spaces. This fluid has

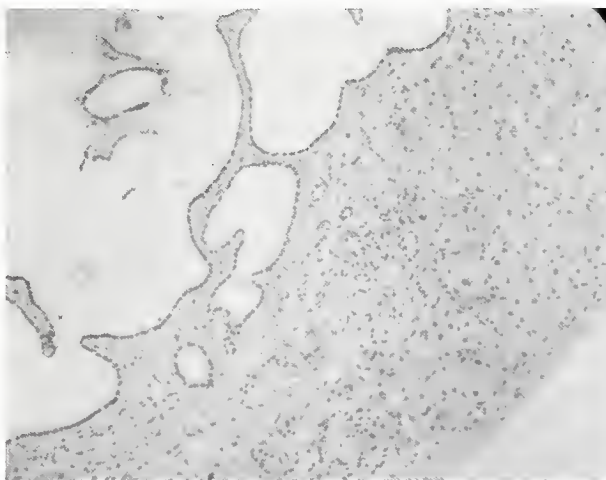


Fig. 6. Photomicrograph of a section stained with hematoxylin and eosin, showing a portion of the wall of one of the larger hepatic cysts. Beneath the lining of the cyst the adjacent liver tissue shows distortion of the compression type. Magnification x 100.

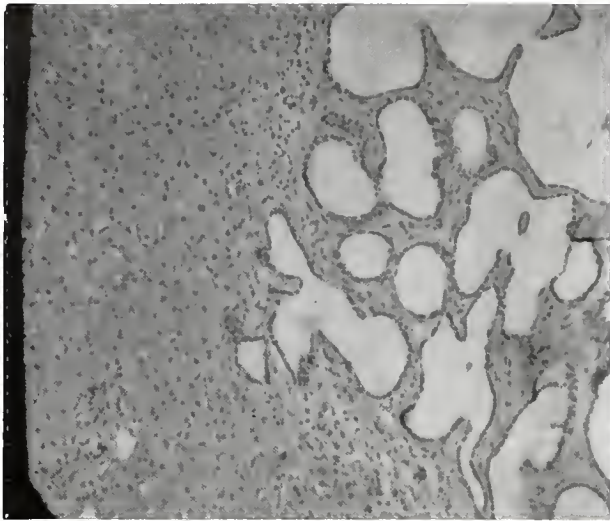


Fig. 7. Photomicrograph showing small cysts within the uniform cuboidal cellular lining. Despite the proximity of such cysts, they seldom communicate. Magnification x 100.

much the same composition as interstitial fluid or lymph,⁷ containing very little protein, bilirubin, glucose, or enzymes. The equilibrium with other body fluids is apparently maintained through the increased content of sodium and chloride. The small amount of calcium in the cystic fluid would be explained by the lower concentration of protein, to which calcium is bound. The low content of glucose in the fluid is difficult to explain. Perhaps the glucose is me-

tabolized over a period of time by the surrounding cells.

Since these studies indicate that the fluid present within the cysts is not due to an accumulation of secretions from the cells lining the cystic space, it appears that the cysts possess growth potential in their own right. When the cysts were aspirated, the fluid was noted to be under very little tension, and the collapse of one cyst did not cause any observable change in the adjacent cysts.

SUMMARY

We have reported a case of polycystic liver disease diagnosed preoperatively by means of a liver scan. This is believed to be the first case in which chemical analysis of fluid from the cysts has been reported. The results of this analysis suggest that the cysts within the liver are independent structures lined by a proliferating layer of cells and filled with fluid which has the approximate composition of interstitial fluid.

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The only certain remedy hitherto known in Europe, for the cure of [syphilis], is mercury, which may be used in a great variety of forms, with nearly the same success. Some time ago it was reckoned impossible to cure a confirmed lues without a salivation. This method is now generally laid aside, and mercury is found to be as efficacious, or rather more so, in expelling the venereal poison, when administered in such a manner as not to run off by the salivary glands.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 349.

Complications of Tetracycline Therapy for Acne

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PRIMUM NON NOCERE—first do no harm. This is a precept all physicians are well acquainted with and one which dermatologists in particular take into account when treating benign dermatoses. It was this concern for safety and the questions regarding safety asked by my patients that prompted me to study patients being treated with tetracycline for acne.

REVIEW OF CASES

During the first 21 months of practice all patients with acne for whom tetracycline had been prescribed were told of the common side effects of this medication and were encouraged to call or return to my office if problems arose. They were questioned about their health status, drug allergies, any personal or family history of diabetes, and whether or not they were taking an oral contraceptive. On all follow-up visits they were asked whether or not they were having any problems with the medication.

Of 202 patients treated with tetracycline for 1 to 21 months (Tables 1 and 2), a possible side effect developed in 27 (13 percent) (see Table 3). A pustular folliculitis, more marked on the chin and perioral area, developed in 7 patients (3.5 percent of the total). In one of these cases *Escherichia coli* was grown in cultures of the nasal mucosa and a pustule on the chin. Cultures were not done in the case of the other patient, a male teenager. The gram-negative folliculitis occurred in a 22-year-old woman who had been treated with tetracycline for several years. She discontinued use of the drug, then resumed it (250 mg three times daily) and two weeks later noted the pustular rash. The rash cleared up in about five days after the drug was withdrawn and povidine-iodine (Betadine) washes were begun.

In 16 patients, or 12.3 percent of the women studied, *Candida* vaginitis developed during tetracycline therapy (Table 4). Diagnosis was made by

examination of smear in four patients and by a history and response to nystatin (Mycostatin) vaginal suppositories in the remaining 12 patients. This incidence of 12.3 percent compares with an incidence of more than 33 percent in a study by Caruso (1964)¹ of *Candida* vaginitis in women of childbearing age on tetracycline therapy for one month, and with an incidence of clinically and laboratory proven *Candida* vaginitis of about 6 percent in 445 non-pregnant, non-diabetic women of childbearing age who were not using intrauterine devices or taking antibiotics. The latter study, conducted by Davis in 1969,² constitutes a fairly good control group of normal women, and the 6 percent incidence of *Candida* vaginitis was essentially doubled in the present study.

The average age of patients acquiring yeast vaginitis was almost six months older than that of the control group. Only two of my patients with this condition were teenagers, while 11 were in their twenties and thirties. The duration of tetracycline therapy when vaginitis developed ranged from 1 to 20 weeks, for an average of 7 weeks. Those patients who did not acquire vaginitis took the drug for an average of more than six months. The amount of tetracycline dosage was slightly higher than that of the control group (Table 4); 75 percent were taking the drug from two to four times daily.

None of the patients was diabetic and none was pregnant. Only 1 of the 16 female patients admitted that she was taking an oral contraceptive.

Ten of the 16 patients resumed treatment with tetracycline at the same or slightly lowered dosage, and in two of these ten the vaginitis recurred. The other eight, however, experienced no recurrence after taking tetracycline again for an average of four months.

The seven patients who had gastrointestinal complaints (Table 5) averaged about the same in age as patients who did not experience such problems—21.4 years. In general, the symptoms developed rather quickly—on an average of six weeks of thera-

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Table 1
Sex Distribution

Sex	No. Cases
Female	133
Male	69
	202

Table 2
Age Distribution

Age (Years)	No. Cases
13-19	97
20-29	89
30-36	16
	202

Table 3
Complications in Twenty-seven Patients
(13.3% of 202)

	No. Cases
Yeast vaginitis	16*
Gastrointestinal disorders	7
Folliculitis	2
Allergic rash (probable)	1
Schaumburg's disease	1
Influenza syndrome with lowered WBC	1

* 12% of female patients

Table 4
Comparison of Patients with Yeast Vaginitis
with Control Group

	Vaginitis Group	Controls
Average age	25.3 years	20.9 years
Duration of tetracycline therapy	1-20 months	1-21 months
Dosage schedule		
Once daily	2	
Twice daily	10	
Three times daily	3	
Four times daily	1	

Two times daily or less: 69% of patients
Three or four times reduced to one or two times: 25%
Three or four times daily: 6%

Table 5
Gastrointestinal Complications

	No. Cases
Nausea	3
Diarrhea	2
Brown hairy tongue	2
Esophagitis	1
Flatulence	1

Complications of Tetracycline Therapy

Irritation
Nausea
Vomiting
Suppression of normal flora
Diarrhea
Folliculitis
Moniliasis
Allergic reactions
Rashes
Anaphylactoid reactions
Photosensitization
Exaggerated sunburn
Onycholysis
Chelation
Discoloration of teeth
Inhibition of protein synthesis
Enamel hypoplasia
Bone growth retardation
Negative nitrogen balance
Fatty degeneration in liver
Presence of degradation products

py, and within the first week in three cases. In all seven patients the symptoms were relieved promptly when the drug was withdrawn. Four of the seven resumed treatment without experiencing a recurrence of the gastrointestinal disorder.

COMMENT

A synopsis of complications associated with the use of tetracycline taken from Clendenning's article³ is shown in Table 6. The most common side effects are those listed under the first two headings: irritation and suppression of normal flora. Staphylococcal enterocolitis usually occurs in patients on tetracycline therapy following abdominal surgery, and has not been a problem in patients taking low doses for acne.⁴

Fortunately allergies to tetracycline are unusual, although exanthema, urticaria, erythema multiforme, fixed drug eruption, purpura, and anaphylaxis following usage have all been reported. Sulkowski and Haserick,⁵ in 1964, reported a systemic lupus-erythematosus-like reaction to tetracycline. Non-thrombocytopenic purpura following tetracycline therapy for lymphangitis was reported in 1960.⁶ Photosensitization and onycholysis in association with tetracycline has been reported rarely, as has a yellow discoloration of the teeth and possible hypoplasia of the enamel.

Tetracycline given to pregnant women from the fourth month of gestation, when the fetal teeth are calcifying, causes yellow discoloration of the teeth and possible hypoplasia of the enamel.⁷ This abnormality is thought to be largely related to dosage. Enamel hypoplasia and discoloration of the permanent teeth occurs if tetracycline is given to children up to about seven years of age. Fatty degeneration of the liver has been reported in pregnant or postpartum women with urinary tract infections given large intravenous doses of tetracycline,⁸ and some of these patients have died. This complication has also been reported in some non-pregnant women given large doses of the drug intravenously.⁹

Tetracycline should be given in decreased dosage and frequency to patients with impaired renal function, since excretion is mainly via the kidneys and patients with impaired excretion develop the symptoms and signs of azotemia if given regular doses of the drug.

The Franconi syndrome,¹⁰ with its symptoms of diabetes, has been reported in patients taking degraded tetracycline in which citric acid is present. The tetracycline is old and looks discolored because of the presence of epitetracycline, anhydrotetracycline, and epianhydrotetracycline. Citric acid, thought to be responsible for the formation of these breakdown products that cause renal disease, has been removed from tetracycline, but when the product becomes old it should be discarded.

Twelve articles were found which involved the

use of tetracycline for the treatment of acne and in which complications were noted.¹¹⁻²² They are summarized in Table 7. These studies included more than 950 patients, and the average incidence of side effects was about 11 percent. As in the present study, the complications were minor, occurred early in the course of tetracycline administration, and were easily reversed. Only seven patients had to discontinue the medication.

Four of the studies included complete blood counts, and in two of these all counts were normal. In one study 54 minor abnormalities were found in 100 patients treated with a variety of antibiotics, including chloromycetin. Only 19 patients were receiving tetracycline alone. There were nine instances of leukocytosis and three of leukopenia. There were no controls in any of the three studies in which abnormalities were reported.

Of interest is Osment's study of 22 patients on tetracycline therapy and of seven controls. Three of the 22 patients treated with tetracycline had slightly lowered white blood cell counts as compared to none among the controls.

To my knowledge no serious hematologic disorders have been reported with the use of tetracycline for acne.

SUMMARY

Minor side effects were noted in a group of 202 patients receiving tetracycline for the treatment of acne over an average period of six months. *Candida* vaginitis occurred in about 12 percent of the women patients, the majority being from 20 to 40 years of

age. Most of the complications occurred in less than two months after the beginning of treatment and were easily reversed.

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Table 7
Studies of Tetracycline Therapy

Authors	No. Patients	Duration of Therapy	No. with Complications	No. Discontinued
Rein et al (1954)	90	4 weeks q.i.d.	38 (GI)	4
King, Forbes (1954)	71	2 weeks-3 months q.d.-b.i.d.	0*	0
Becker, Fredricks (1955)	14	3 months-2 years (1 month t.i.d.)	? (GI)	1
Cronk et al (1956)	72	43 3 months b.i.d.	7 (GI)	2
King, Forbes (1956)	203	1-18 months (4.5) q.d. - b.i.d.	7 (GI)†	0
Witten et al (1960)	100	1 to 12 months	54 (WBC)	0
Sulzberger et al (1960)	208	1-321 weeks b.i.d.	18% (tetracycline) 9% (tetracycline with nystatin)	0
Wansker (1961)	40	2 months t.i.d.	None	0
Cornbleet (1961)	38	1 year b.i.d.	2 (GI)	0
Cornbleet (1964)	50	4-22 weeks	6 (GI)	0
Smith, Mortimer (1967)	68	3-9 months	17%	0
Osment, Hammack (1970)	22	1-9 months	3 (WBC)	0

* No abnormalities found in 19 complete blood counts done.

† No abnormalities in 24 CBCs.

Editorials

HAIR

A remark heard with increasing frequency in my office goes something like this: "Our son has long hair down to his shoulders. We don't like it and have told him so. He refuses to get his hair cut and threatens to leave home if we insist. We don't know what to do."

I am not at all sure that I know what advice to give, but inasmuch as the hair is part of the organ in which I specialize, and I have a son with long hair, I have given the subject more than passing attention.

Too, the difference between generations was thrust upon me recently when I received an advertisement for a new tape of the "big bands"—you know, the Benny Goodman, Bob Crosby, Les Brown, etc., of my days in school—and on the cover was the male human animal in a zoot suit, complete with long chain constantly wrapped first this way and then the other around the right pointing finger. It could have been me, class of '39, and my parents had about the same reaction to my garb as many parents do today to long hair.

I have asked several teenagers and young adults about zoot suits and they know no more about it than, as parents, their children will know about long hair. Or is it more than a fad? I suspect hair is much more important than clothing styles.

I cannot go deeply into the psychological meaning of hair, the interpretation of the cutting of hair as a symbolic castration, or the interpretation of the play, "Hair." I'm not a psychologist, or a psychoanalyst, or a drama critic, but as a dermatologist and observer, I can say something of the manifestations of the hair's important role.

It is obvious that when man wishes to be recognized as a member of a particular group of his fellow beings, one of the first and easiest things for him to do is adopt the "belonging" hair style. Note the Van Dyke, the Chinese sailor's pigtail, the judge's wig, the monk's tonsure, the prisoner's shaved head, and today, the hippie's and progressive youth's mane and beard—and even the descent of the sideburns and posterior neck hairline upon many staid bankers, lawyers and physicians.

Today's return to uncut hair and unshaven beards has prompted me to ponder on the reason for the century-old male disguise produced by the shave and

haircut. Frankly, I consider both a necessary nuisance—but, nevertheless necessary.

In my youth, I had a rather distorted idea of how the male human animal really looks. I was inclined to picture him as I most often saw him—quite generally saw him in life, always saw him in ads—as a short-haired, smooth-faced, Arrow-collared, Brooks-Brothers-suited, idealized biped. Now I have ample opportunity to see the shaggy, leonine male animal with all his imposing hirsute corona.

I cannot but wonder why man began cutting off his hair and submitted to the daily loss of time and minor torture of shaving clean his face. Was it perhaps to give less shelter to filth and lice? Or for some other, even more compelling reason?

I have heard it said that the bearded, long-haired man, engaging in hand-to-hand struggle, offered such good hand holds to his opponent that he was an easy victim to some smart, progressive contestant who decided to go into combat slippery and hairless. Perhaps the hairless progressive gradually succeeded in liquidating those reactionaries who proudly kept their hair and beards!

Today, even though mortal hand-to-hand combat is rare, the chances of survival might nevertheless be greater for the shaved. The beard and long hair are surely ample receptacles and reservoirs and offer good cover and habitats to airborne pollutants and contaminants, living and dead; to bacteria, viruses, and fungi; to the oil, grease, dusts, and grime of our modern dirty world. Most assuredly the mane and beard would appear to be an additional and unnecessary potential germ-carrier, particularly in medical students, physicians and health personnel engaged in their trips of mercy from one infected patient to another.

In other words, hair is a prominent status symbol. In England, to look like a judge you still put on a powdered wig. If you want to belong to a group or cult anywhere, you let your hair and beard grow long, as the rest do, or you shave it all off, or leave a little pigtail, or develop an Afro bush, as do the rest of your crowd.

Hair and strength are undoubtedly linked in human thinking and human lore. Samson and his friends believed this, and so did Delilah.

More real than this supposed relationship of hair to strength, however, is the undoubted close connec-

tion between hair and sex. As one of my young male human animal friends put it, "The girls like it, and as long as they like it, we will have it." Maybe the role of the female human animal should be investigated. Maybe, as with everything else, it really is her doing.

Bearing in mind all this, we can no longer wonder that, next to sex, hair takes a central place in man's and woman's attention and concern—and that he and she are willing to spend almost as much time and money on one as on the other.

So, at most, parents, your son probably needs to exert his independence. At least, he is simply following a fad. In any event, he resents being told what to do, and he therefore opts to leave home rather than give in. Immature, true, but time, experience, and love will bring maturity.

The way a person looks on life, his personal identity, his self-acceptance, his relationships, his self-concept—all these are involved in the manner in which he grooms himself.

Older people today are bothered by long hair and sloppy dress—perhaps more than they are bothered by the economic, social, and political problems one finds on almost every street corner. Almost immediately long hair is associated with free love, drug use, campus unrest, and all the rest. Yet when one thinks calmly about what's going on, failure in communication and relationship—not hair or dress style—sums up the real problem.

When people really care, or want to care about one another, they will move toward one another and

will accept one another as they are without prejudicial judgment or condemnation. Within this sort of climate, communication and relationship develop. In the Christian sense this means that people love one another. Once this love is operative, problems have a way of working out.

When love, acceptance, understanding, and forgiveness are shared between children and parents, even in a halting and limping way, the resultant gift is "livability."

S. F. HORNE, M.D.

THE SOUND OF PISSING

A urologist and a fluids engineer have teamed up to provide a new dimension in the analysis of lower urinary tract function—study of the sound of urination—illustrating how the trained scientific mind will sooner or later seize on the ordinary and do something useful with it. The method does not involve any interference with the usual effort of micturition, thus does not introduce its own problems, which is the case with other techniques for measuring the energies involved in passing water. Properly done, the recorded patterns can be interpreted to reveal occult obstruction of the urethra. Thus, one of the common sounds of everyday life, heard all the time and rarely commented upon and then usually in joking, becomes useful in diagnosis, treatment and research. Good science turns up in odd corners of life.

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Correspondence

MORE ABOUT GUNS

To the Editor:

We read the article entitled "The Gun and Its Victims" by Fatteh and Troxler in the December issue of the NORTH CAROLINA MEDICAL JOURNAL, and were totally dismayed and disgusted that such an article could appear in a "scientific" journal. The conclusions of the article were totally, from a scientific standpoint, erroneous and mostly only indirectly related to the data presented. To add insult to injury, further comment was allowed the author on the editorial page.

According to the paper there were 406 of 1,024 deaths in North Carolina attributable to suicide in 1970. We feel that this entire group could be thrown

out on the basis that there are many other easier ways to dispose of one's self than with a firearm. A recent article in the *New York Times* has indicated a growing trend to suicide by drugs and a corresponding diminution by violent means. Of the 484 homicides probably 75 to 80 percent would have been done by other readily available means. The 90 accident victims are legitimate, but the answer here is better education, not making gun ownership so difficult that only criminals can own one. The 44 cases of undetermined manner of death are up for grabs.

The Gun Control Act of 1968 is perhaps one of the worse pieces of legislation to come through Congress in many a year. Because of President Kennedy's tragic death by the assassin's bullet fol-



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lowed by Martin Luther King, Jr. and Robert Kennedy, this harmful legislation was passed to soothe the consciences of the hysterical do-gooders. Since this act was passed in 1968 there have been more gun thefts than the estimated number for the previous 100 years, thereby insuring the criminal element enough firearms for the next 100 or more years. All the act has done is to penalize the law-abiding sportsman and gun collectors. Guns have indeed been made much more valuable by this law.

Gun registration is what, we feel sure, the authors are aiming at when they refer to "laws controlling the sale and purchase of guns and ammunition should be amended to render the procurement of these items, without sound justification, very difficult."

Guns are part of the American heritage, and like alcohol, guns are here to stay. Most alcohol legislative control is properly aimed at the individual offender, while most of the recent gun legislation and most of that proposed by the anti-gun group is aimed at the gun itself, thereby including the offender and non-offender alike. The result is that the criminal continues to have his gun and the law-abiding citizen who owns a gun bears the cost and inconvenience.

The right to bear arms was considered important enough to be included in our constitution. A military take-over in the United States is not inconceivable and the wide distribution of arms among the citizens is a great deterrent to this sort of thing. When Hitler took over Austria in the late thirties, one of the first things the Nazis did was to take the government firearms registration list and collect all guns from the people, thereby insuring little or no resistance.

We feel that the Gun Control Act of 1968 and much of the proposed gun legislation are works of "do-gooders" who are "not knowers." Unfortunately the authors' conclusions fit into this category.

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Pinehurst

To the Editor:

I hope "The Gun and Its Victims" will be read by all those in North Carolina who have some concern for public health and safety. One of the many accomplishments of the article is to make us focus on an agent that is responsible for one death in every 45 that occurs in North Carolina. I pray that we are

not becoming so inured to violence that we accept this statistic with equanimity.

Those of us who are career medical examiners see gunshot injuries and deaths in breadth and depth that no other experiences. While we are no longer involved with patching the holes as we did in our internships, we are involved literally daily in shooting scenes, social history, situational background, scene reconstruction, evaluation of police reports and of testimony of witnesses, and weapon examination, as well as analysis of the external and internal wounds. Those of us who are so involved are very much aware of the data involving gunshot wound deaths from other states and from other nations. Many of us have had experience from other parts of the United States and other parts of the world. This sort of expertise is perhaps rivaled only by some of the more experienced detectives from homicide divisions of the more sophisticated law enforcement agencies. I know of no such professionals who do not contest that much of the epidemic under discussion is due to thoughtless and unnecessary availability of handguns. A measure of gun control is absolutely necessary. It exists in other free countries that have a far lower gunshot death rate than ours. Many of the letters received by the JOURNAL and by Dr. Fatteh reflect intensely emotional protests to the concept of gun control. Most of those protesting gun control write in terms of their fears of "some great power taking all our guns from us decent people and letting the criminal horde descend upon us."

Those of us advocating gun control are referring to restrictions or limitations on certain guns, not by any means totally outlawing private ownership of firearms. Gun control relative to automatic weapons, grenades, bazookas, etc., is in effect and has been highly effective. Controls on automobiles have been moderately effective in diminishing the number of machines on the road. The bans against automatic weapons were severely objected to at one time, so were the original attempts to put restrictions on drivers and automobiles. Some farmers react violently to state or federal controls on pesticides. Historically, there were intense objections to licensing of marriages or of establishment of qualifications to practice medicine. As individuals we have to make some concessions for the welfare of society as a whole.

Having had the privilege of reading many of the letters received by the JOURNAL and Drs. Fatteh and Troxler, I react to many of those physicians attacking the article with amusement and pity. The contentions are like none I have previously encountered from physicians. Experienced in presentation of material and in refutation and rebuttal in national and international meetings as well as in the courtroom and on the ward, I have never encountered the rabid emotionalism or non sequiturs that some of the letters manifested. Too many rambled about

"Communist conspiracy"; "misguided . . . who seek to take away the only protection that a man can have for his family in this day and time"; "guns don't kill people—people kill people"; "I am an avid hunter and object to your banning guns"; "studies show the present situation in Ireland is due to taking guns away from the people"; etc. etc. It seems hopeless to suggest to these men that some reading on the subject or a good bit more personal experience might give them broader bases on which to mount opinions. I believe Drs. Fatteh and Troxler will propose a few articles that might be of some interest to those who still have an open mind.

Those of us who are career medical examiners are impressed daily with the loss and futility associated with gunshot wound deaths. It is readily apparent that so many of the victims would not have died except for the totally unnecessary accessibility of a gun. Obviously a person is ever so much more likely to survive attack by stick, knife or fist, or even poison for that matter, than by gun. A gun so often means instantaneous death when a few seconds for reflection caused by having to use less dangerous weapons would have the potential murderer change his mind. There is virtually no evidence whatsoever that people are protecting themselves from "the great evil forces" outside their homes and stores by the possession of firearms. No one is contending that some restriction on use and ownership of firearms will solve the entire problem. In any event Drs. Fatteh and Troxler have done an admirable job, particularly in the face of the handicaps of accumulating data concerning the whole State for a year in which the Medical Examiner System involved only about one-half of North Carolina. I hope we may see and hear from them and others more information supported by facts and experience that have not previously been available in this State.

PAGE HUDSON, M.D.
Chief Medical Examiner

Chapel Hill

To the Editor:

As you will note, it is beyond my self-control to sit idly by and see a fine scientific article such as that offered by Abdullah Fatteh and David Troxler in the December, 1971, NORTH CAROLINA MEDICAL JOURNAL, conclude with a controversial statement that the gun laws in this state as well as other states are too lenient. This conclusion, in my opinion, either wittingly or unwittingly gives support to all the misguided governmental officials who seek to take away the only protection that a man can have for his family in this day and time.

It is annoying when one of my colleagues—and my colleagues are great people—gathers his white shroud of virtuous statistics around him (of the same

fragile caliber as mine) carefully adjusts his halo and solemnly intones that people kill people with guns and that more restrictive gun legislation is needed to save us all from being murdered or from suicide. People kill more people with automobiles: 150 killed, 9,565 injured daily in the United States with automobiles. People kill people with knives, drugs, kindness, poisons and sometimes, I think, misconceptions.

My colleague; his chest never more expanded nor his claim to fame never more exalted than when he joins the pious throng who deplore the very existence of a gun. Today, when people are afraid to walk the streets of their own home town after dark, and who are afraid to let their wives and children travel through the countryside without apprehension, and who can no longer visit the capitol of their nation without fear or trepidation and who are afraid to catch a cab from their hotel to the theatre district in our larger cities, disagree vehemently with any person or group of persons who threaten to take their only protection (a gun) away from them. Even the police agree that if the threat of reprisal shooting by a citizen when attacked were removed, crime would be increased overnight by an enormous amount.

Hitler when he wrote *Mein Kampf* said he intended to destroy us and he tried it. Khrushchev when he visited Disneyland said he intended to bury us, but they haven't gotten around to it yet; they've been too busy watching from the sidelines while some of our own people are trying to do the job—with help from mistaken conclusions like that recently published in our medical journal. Teddy Kennedy when he spoke to the Board of Directors of the National Rifle Association threatened the passage of gun legislation in the Congress with the cooperation of the people or without it. Shades of Communism? Congressman Mittvah when he introduced his hand gun confiscating bill this year said he didn't expect the Congress to do anything about it at present, but that he would have it standing by, waiting for the next traumatic and hysteria producing assassination. They remind me of buzzards roosting ominously and quietly on the dead limbs of an oak tree in the Ozarks. I'll tell you one thing, this is the first bunch of buzzards that I ever saw who posted themselves up in a tree to wait patiently for their carrion to be delivered at their feet.

Opponents who oppose the ownership of guns by private citizens for the protection of their rights under the constitution, intend to eliminate the private possession of firearms in this country, as in Europe, except by the politically and economically privileged classes, and, unfortunately, by the criminals.

Let no man be deceived by the overwhelming presence of honied words, of silken gloves, or feints and planned withdrawals. The steel is there and it is

a blind man, a stupid man, or a fool who does not see it.

Studies by interested and substantial people, both governmental and private, after reviewing the present situation in Ireland have come to the conclusion that one of the reasons such terrible things are happening in that country today is that the politicians years ago took away the right of a private citizen to have and bear arms in his own protection. Legislation introduced in that country is worded to say that protection will be given to the individual citizen by the police, then in the next breath, the politicians took the guns away from the police and now helpless people throughout the cities in Ireland are being murdered, robbed, looted and raped because they have no way in the world to defend themselves against the criminal mobs that are running wild. It is interesting to note that in the Irish countryside, where the law provides that a farmer may have in his possession a shot gun or a rifle, for the protection of his animals, none of this has taken place. Need one say more about the protection that a gun gives to one's private home and premises.

In my opinion, there are just as many murders and suicides (perhaps even more) caused by automobiles, drugs, and drunken driving, than there are due to guns. Any physician experienced in emotional illness will tell you that if a depressed person

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In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®

(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemo-

Trobicin®

sterile spectinomycin dihydrochloride
pentahydrate, Upjohn
single-dose intramuscular treatment

High cure rate: * 96% of 571 males, 95% of 294 females

(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of *Neisseria gonorrhoeae* in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluable and were not included.

JA72 1848-6

lobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 4 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is referred.

Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: Vials, 2 and 4 grams—with ampoule of Bacterio-

satic Water for Injection with Benzyl Alcohol 0.9% w/v. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.

Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.

For additional product information, see your Upjohn representative or consult the package insert.

MED-B-1-S (LWB)

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decides to commit suicide he will do it by whatever means available, unless protected from himself. A gun only makes it a good deal less messy than a knife. They also will tell you that a tremendous number of head-on collisions and other types of accidents are nothing in the world but suicide, and by an ill-responsible person who doesn't care if he carries four or five other people with him.

Among the more informed and intelligent law enforcement officers in this country is the opinion that the cause of so many incidents involving guns is not availability of the gun itself, but of the lack of proper enforcement of existing laws pertaining to the criminal use of such weapon. It is their opinion that if these laws were stringently enforced, there would be no need for today's debate about private ownership of weapons. So, again I state that statistics will show more people die in automobile accidents than from any type of gun incident including multiple My Lais.

It therefore becomes self-evident that to stop a barrel of water from leaking, one does not have to destroy the barrel, nor publish conclusions suggesting such course of action.

HUGH F. McMANUS, JR., M.D.

Raleigh

Dr. Fatteh replies:

The publication in the December issue of the NORTH CAROLINA MEDICAL JOURNAL, of our paper entitled "The Gun and Its Victims" with an editorial on the subject has resulted in my receiving numerous letters. Since there are always two sides to a coin, some were complimentary and some others critical. I wish to express my deep gratitude to those who wrote, complimentary as well as critical.

In response to the criticism of Dr. McManus, and Dr. Morrison and his group, it must first be pointed out that our remarks do not carry the banner for complete banning of firearms. Also, we do not pretend to suggest that the stricter gun laws will solve all the problems. On the other hand, the easy availability of guns is, in our opinion, a significant factor affecting the rate of firearm deaths. No doubt, if the guns are taken away people will use other means to kill themselves and others. However, it has been shown by Newton and Zimring that attacks by firearms are five times more deadly than attacks by knife.¹ Extensive studies indicate that "a significant reduction in the availability of domestic firearms should force many potential killers to use less efficient weapons or to express their aggression in other, less harmful ways."² Suicidal attempts using guns are almost always successful whereas those using other methods have been frequently helped to live. In their forthcoming book, Etzioni and Kemp³ have described results of domestic and international gun control comparisons. Their international com-

parisons suggest that "the availability or absence of firearms, particularly handguns, significantly influences rates of homicide and armed robbery." On the local scene also, these authors conclude from their comparison that "restrictive gun control measures . . . are associated with significantly lower rates of homicide, armed robbery, accidental death, and injury due to firearms."

For a problem such as deaths from firearms, there cannot be just one solution. Among the salient measures should be, no doubt, rigidly enforced registration of firearms, and strict enforcement of laws if the firearm is used criminally. However, the fact remains that tightening up the present gun laws, I believe, should be a major measure.

ABDULLAH FATTEH, M.D., Ph.D., LL.D.
Associate Chief Medical Examiner

Chapel Hill

References

1. Newton GE, Zimring FE: Firearms and Violence in American Life: A staff report to the National Commission on the Causes and Prevention of Violence. Washington, D.C.: Government Printing Office, 1970, p 41.
2. Etzioni A, Kemp R: Technological "shortcuts" to social change. Can major segments of contemporary social problems be handled efficiently by technology? Science 175: 31-38, 1972.
3. Etzioni A, Kemp R: Technological short cuts to social change. New York: Russel Sage Foundation (in press).

INFORMATION GATHERING

To the Editor:

I am writing this letter to the JOURNAL to indicate my concern over two matters which I feel are worthy of comment.

The first thing is the recent mailing out of an additional questionnaire from the North Carolina Board of Medical Examiners. This additional questionnaire concerns materials that had not been requested before and information that does not seem pertinent to the fulfillment of the requirement of that office. In fact, it seemed to me that this board may have suddenly but surely become involved in the ever growing attraction to accumulate information that is neither necessary to their operation nor proper as it probably involves invasion of privacy—or soon will. I wrote to the board voicing my concern about this initial activity in accumulating additional information on physicians. Their reply to me was that they have received so many requests for information on physicians they felt they would like to have this information on record. I still feel that it is improper that they engage in such information gathering. I know that I prefer any request they receive for information on me be forwarded to me for my judgment and answering. I also feel that most physicians would have the same attitude.

The second matter that concerns me is the fact that the Committee on Maternal Health has recommended the approval of the State Board of Health Therapeutic Abortion Report form as submitted. This is reported in the December, 1971, JOURNAL.

At the fall conclave meeting of the Legislative Committee of the State Society I voiced my question and disapproval of this form becoming a matter of state requirement.

It appears to me that if the state has approved the legitimate method for legal abortion it should not be stigmatized by a special form and report. This also creates a source of retrievable information that could be damaging to persons who were not intended to be damaged by the concept of such a form. It appears that if the state does not see a need for reporting spontaneous abortions (since this

is a legal procedure), therapeutic abortion should not be so separately recognized. This record is a threat to the privacy of the individual and an additional burden of paper work to the individual physicians.

I sincerely hope that the editorial board of the JOURNAL will give some thought to the questions above and if they think appropriate publish this letter or give editorial comment on the subject matter to which I have referred.

JOHN R. GAMBLE, JR., M.D.

Lincolnton

Committees and Organizations

THE NORTH CAROLINA MEDICAL SOCIETY AND HEALTH CARE DELIVERY MECHANISMS

Introduction to a Conference

Charles W. Styron, M.D.

The Medical Society has concerned itself intensively this year with the problems of health care. The principle deliberations have occurred amongst the members of the new Medical Society Committee on Health Care Delivery and the Committee on Long Range Planning of the Durham-Orange County Medical Society, but also with other committees of the Society in an ancillary and tangential fashion. These committees are Peer Review, Utilization Review, Insurance Industry, Blue Shield, Professional Insurance, Social Service Programs, and others to less degree.

The concern with this subject this year derives from several sources, including the Medical Society and the interest of individual members, the consumer, the news media, government, other third parties, and a host of planners, including some that are health oriented such as the American Hospital Association, American Public Health Association, and American Nursing Association, and others that have an indirect interest or no significant interest at all in health care but take on the subject as an intellectual exercise from their respective think tanks. We are aware of these plans and the resulting charge for change.

Fortunately physicians who are engaged in delivering medical care have had the foresight to study the many suggestions for improvement of medical care delivery without the precipitous adoption of any

significant change. In a word, the great ideas that have been proffered to us have not been taken at face value. And so we are here at this conference to discuss some of these problems in the end that we may intelligently add to and modify our methods of practice.

Several important areas must be considered during this conference. They are access, quality, cost, third party associations, and the government participation.

Comments on these areas of interest may be useful in our discussion here. First, access presents a more acute problem in some areas than in others, but is almost always a problem to the primary physician, less so to others. Do the methods that we consider here make us more accessible with the same input of time? Does size improve efficiency, or do increased numbers in group practice become less efficient? To maintain equal efficiency do we require increased numbers of non-physicians to reach the efficiency of the solo practitioner? Are increased numbers of physicians an answer to access, and is the need remotely calculated when leaders of young physicians avow shorter working hours as opposed to the historically longer working hours of physicians in this generation and the past?

Has quality in medicine improved with time? Do physicians avail themselves of educational opportunities? And can they do more? Obviously quality does change and improve with time. The physician of twenty years ago, even ten years ago, in static practice, could hardly meet the requirements of practice today. Observation of the changing concepts of medical practice would seem to support the concept that physicians of today not only do excellent practice, but

are constantly striving to improve the quality of their services. Indeed there are valid criticisms of quality. I would affirm, however, that it is difficult indeed to judge quality at a distance. Can a professor of medicine make valid judgments of quality for the isolated physician who is forced to see 60 or more patients a day? The criticism should be more often, how well he works than otherwise. Could the professor of medicine himself produce a similar day's work of equal quality?

And costs of medical care! Does anyone honestly believe that we can achieve improved quality of medical care at reduced costs and at the same time maintain and improve access? Per diem costs or office patient costs will certainly rise, with health labor accounting for 66 percent of the bill. Utilization would seem the only answer to the hospital problem and in all likelihood will account for total patient cost reduction per diem through certified admission programs—providing doctors accept this concept.

How far will the third party go? Witness the controls placed on our usual and customary charges by Medicaid and Medicare. Consider the guidelines that third parties develop for control of individual fee schedules and continued attempts to develop fee schedules for the provider. It is my observation that the third party will go as far as we will allow it to go

in developing restrictive measures for practice. These are areas in which the best informed individuals from the practice sector are required.

There is abundant evidence that government intends to control the practice of medicine. The process has been one of gradual erosion of medical prerogatives. How much medicine intends to retreat will depend largely upon us as individuals, and our collective voice.

It would seem that providers are beginning to understand mechanisms of practice in third party areas through their various organizations. Perhaps it is more important to develop a philosophy of medicine in which freedom of operation is the control theme. A few weeks ago an assistant secretary for health and environment, in response to his position on health care as a right versus access to health care as a right, said that government and the present administration looked on medical care as right and that medical practice and government would shortly have a confrontation on this issue. Support for the government viewpoint comes from many sectors, even medicine itself, but hardly for the providers.

We must see each side of the issue, know what we believe, and make it known without hesitation.

CHARLES W. STYRON, M.D.



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Bulletin Board

WHAT? WHEN? WHERE?

In Continuing Education April, 1972

I. Current Events in North Carolina May 1-2

Anatomical and Clinical Considerations of the Hand
Place: East Carolina University
Fee: Practitioners and staff \$100; Residents, \$50
For Information: ECU, Division of Continuing Education
Box 2727, Greenville 27834

May 4-5

Symposium on Problems of Drug Abuse
Sponsored by: Division of Continuing Education, Bowman
Gray School of Medicine, Winston-Salem
For Information: Emery C. Miller, M.D., Associate Dean
for Continuing Education, Bowman Gray School of Medi-
cine, Winston-Salem, 27103

May 18

23rd Annual Scientific Sessions of the N.C. Heart As-
sociation
Theme: "Sudden Death"
Place: White House Inn, Charlotte
For Information: Mr. Jim Street, 1 Heart Circle, Chapel
Hill, 27514

May 20-24

Annual Meeting, State Medical Society
Place: The Carolina, Pinehurst
For Information: Mr. William N. Hilliard, Executive Di-
rector, P. O. Box 27167, Raleigh, 27611

May 26, 1 p.m. thru dinner

New Bern Medical Symposium
Subject: Pediatric Emergencies
Place: Ramada Inn, New Bern
Speakers: Dr. William DeMaria, Duke University, Pedi-
atric Renal Emergencies; Dr. Ramon Canent, Duke
University, Pediatric Cardiac Emergencies; Dr. John
Knelson, University of North Carolina Respiratory Emer-
gency in Newborns; Dr. Campbell McMillan, UNC,
Pediatric Hematologic Emergencies
Dinner Speaker: Mr. Charles Dunn, Director, State Bureau
of Investigation, "What Can Be Done About The Drug
Problem in North Carolina?"
Ladies Program: Registration 1:00 p.m.-2 p.m.—Transpor-
tation provided
Tour of Tryon Palace 2:30 p.m.
Tea 4:30 p.m. (Residence of Dr. and Mrs. J. N.
Blackerby)
For Information: Zack J. Waters, Jr., M.D. Program Direc-
tor Craven-Pamlico County Medical Society, P. O. Box
2725, New Bern 28560

May 26-27

Eighth Annual E. C. Hamblen Symposium on Reproductive
Endocrinology and Family Planning
Sponsored by: The Department of Obstetrics and Gyne-
cology, Duke University, Medical Center, Durham
Subjects:
I. Basic Reproduction Mechanisms:
II. Clinical Endocrinology
III. Fertility Control
For Information: Dr. Charles B. Hammond, P. O. Box
3143, Department of Obstetrics and Gynecology, Duke
University Medical Center, Durham, 27710

May 29

Congenital Anomalies of the Cardiovascular System: Thorax
Place: East Carolina University
Fee: \$50
For Information: ECU, Division of Continuing Education.
Box 2727, Greenville, 27834

June 4-9

The Seminar: Cooperative Program in Continuing Educa-
tion at Myrtle Beach, South Carolina has been cancelled.

July 23-28

Southern Obstetric and Gynecologic Seminar, Inc.
Place: Grove Park Inn, Asheville
Registration Fee: \$50
For Information: Dr. George T. Schneider, Ochsner Clinic,
1514 Jefferson Highway, New Orleans, La. 70121

II. Coming Events in North Carolina September 22-26

State Medical Society Committee Conclave
Place: Mid Pines Club, Southern Pines
For Information: Mr. William N. Hilliard, Executive Direc-
tor, Post Office Box 27167, Raleigh, 27611

October 15-17

Joint Meeting of N.C. S.C. Societies of Ophthalmology
and Otolaryngology
Place: Blockade Runner Motor Hotel, Wrightsville Beach
For Information: Banks Anderson, Jr., M.D., N. C. Society
of Ophthalmology and Otolaryngology, Duke University
Medical Center, Durham, 27710

III. Out of State (through July, 1972) April 21

"Swineford Allergy Conference"
Sponsored by: University of Virginia School of Medicine
Tumor Clinic
For Information: Continuing Education Program, Uni-
versity of Virginia Hospital, Box 333, Charlottesville,
Va. 22901

April 21-22

"The Neonate" Pediatric Conference
Place: University of Virginia School of Medicine Amphi-
theater
For Information: Continuing Education Program, Univer-

sity of Virginia Hospital, Box 333, Charlottesville, Va., 22901

April 23-25

3rd Annual Gynecological Cancer Conference

Place: MUSC, Charleston, S. C.

For Information: Mrs. Helen O'Toole, Staff Assistant, Division of Continuing Education, MUSC, 80 Barre Street, Charleston, S. C. 29401

April 26-28

Emergency Care and Transportation of the Sick and Injured
Sponsored by: American Academy of Orthopaedic Surgeons, Committee on Injuries, in conjunction with S. C. Industrial Commission and S. C. Orthopaedic Association
Place: Midlands Technical Education Center, Columbia, S. C.

Fee: \$50

For Information: E. M. Luncford, Jr., M.D., 2709 Laurel St., Columbia, S. C. 29204

April 27

Nursing Service Administration: Breaking Traditions

Place: Carolina Coliseum, Columbia

For Information: Dr. Elizabeth Stobo, School of Nursing, USC, Columbia, S. C. 29208

April 26-28

Gastroenterology

Fee: \$75

For Information: Medical College of Georgia, 1459 Gwinnett Street, Augusta, Georgia 30902

April 27-29

Annual Residents' Conference—Ophthalmology

Place: MUSC, Charleston, S. C.

For Information: Mrs. Helen O'Toole, Staff Assistant, Division of Continuing Education, MUSC, 80 Barre Street, Charleston, S. C. 29401

May 2

Annual Scientific Assembly

Place: Medical College of Virginia

For Information: Box 91, Medical College of Virginia, Richmond, Virginia 23219

May 3-5

Complications of Trauma

Place: Peabody Hotel, Memphis, Tennessee

Fee: \$150

For Information: American Academy of Orthopaedic Surgeons, 430 N. Michigan Avenue, Chicago 60611

May 3-6

American Academy of Orthopaedic Surgeons Course "Complications of Trauma"

Place: Memphis, Tennessee

For Information: R. A. Calandruccio, M.D., 869 Madison Avenue, Memphis, Tenn. 38103

May 8-12

The Medical and Surgical Treatment of Cardiovascular Disease

Place: Royal Coach Motor Hotel, I-75 and Howell Mill Road, Atlanta, Georgia

Sponsored by: Council on Clinical Cardiology American Heart Association; Departments of Medicine, Surgery, Pediatrics, Pathology and Radiology Emory University School of Medicine; and Georgia Heart Association

For Information: Miss Mary Anne McInerney, Director Department of Continuing Education Programs, Ameri-

Pre-Sate®

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CAUTION: Federal law prohibits dispensing without prescription.

Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e., several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monoamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage in Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage in Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure.

Gastrointestinal: nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, oral spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information available on request.



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can College of Cardiology, 9650 Rockville Pike, Bethesda, Maryland 20014

May 12-13

S. C. Heart Association Scientific Sessions

Place: Ocean Forest Hotel, Myrtle Beach

For Information: Mrs. Anita Baker, S. C. Heart Association, P. O. Box 5937, Columbia 29205

May 15-16

Pulmonary Physiology and Pulmonary Function Testing

Place: VA Hospital, Charleston, S. C.

For Information: Mrs. Helen O'Toole, Staff Assistant, Division of Continuing Education, MUSC, 80 Barre Street, Charleston, S. C. 29401

May 26

Annual Spring Forum for Child Psychiatry

Place: Medical College of Virginia

Sponsors: Medical College of Virginia, Box 91, Division of Child Psychiatry, Richmond, Virginia 23219; and Virginia Treatment Center for Children

May 26-27

Concepts in Health Care Delivery

Fee: \$15

For Information: Meharry Medical College, 1005 18th Avenue N., Nashville, Tennessee 37208

May 29-31

"The Knee in Sports"

Sponsor: American Academy of Orthopaedic Surgeons

Place: Callaway Gardens, Pine Mountain, Georgia

For Information: Jack C. Hughston, M.D., 105 Physicians Building, Columbus, Georgia 31901

May 29-June 1

Seminar in Managerial Decision Making for Community Health Administration

Place: Clemson University, Clemson, S. C.

For Information: Cyril O. Shuler, Industrial Management Department, Clemson University, Clemson, S. C. 29631

June 8-11 (8 a.m.-1 p.m.)

"Cardiac Arrhythmias"

Place: Cavalier Hotel, Virginia Beach, Virginia

Sponsors: Council on Clinical Cardiology, American Heart Association, and Tidewater Heart Association

For Information: Charles L. Baird, Jr., M.D., Medical College of Virginia, Box 894, Richmond, Virginia 23219

Send information for listing to WHAT, WHEN, WHERE, Box 8248, Durham, North Carolina, 27704. To be listed in a specific issue, information must be received by the 10th of the preceding month. Issues are scheduled for appearance on the 15th of each month.

NEW MEMBERS of the State Society

Gordon Bruce Arnold, MD, I, 3426 Corvair Dr., High Point 27262

Thomas E. Breeden, MD, ObG, 211 S. Chestnut St., Gastonia 28052

Hermann Martin Burian, MD, Oph, UNC School of Medicine, Department of Ophthalmology, Chapel Hill 27514

Terence Stephen Carden, Jr., MD (Intern/Resident), Department of Radiology, Duke Hospital, Durham 27710

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 Joseph Everett Swanton, MD, ObG, Landis Heights, Oxford 27565
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 William Samuel Yancy, MD, Pd, 306 S. Gregson St., Durham 27701

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

The University of North Carolina has received a \$6,000 National Health Science Foundation grant for support of a conference on the relationship between the cardiovascular system and psychological processes.

Scheduled for the first week in May, the five-day closed program, "Contemporary Trends in Cardiovascular Psychophysiology," will feature 20 specialists, primarily psychologists, from the United States and Canada.

Dr. Paul A. Obrist, professor of psychology at the UNC School of Medicine, is primary coordinator for the conference.

* * *

Two Vietnamese officers recently spent 16 weeks in training at the University of North Carolina School of Pharmacy.

Lt. Col. Pham-Ky and Captain Dao-Minh-Tam, members of the Vietnamese Army Pharmacy Corps, studied pharmacy manufacturing procedures and control system. Upon returning to South Vietnam they will assist in developing a manufacturing capability to provide drugs for their army.

* * *

One of the newest and most controversial concepts in 20th Century health care was discussed by government official and medical educators at a two-day conference held at the University of North Carolina in February.

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IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully coordinated with bacteriologic and clinical response. When the patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture media. Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level. **Contraindications:** Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in pregnancy has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalyses with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias: Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprolthrombinemia, methemoglobinemia. **Allergic reactions:** Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. **Gastrointestinal reactions:** Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. **C.N.S. reactions:** Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarities to some glycosides, diuretics and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

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administrators from 14 southern medical schools, officials from the Association of American Medical Colleges, and the U. S. Department of Health, Education and Welfare officials.

* * *

Dr. A. Hughes Bryan, a pioneer University of North Carolina nutritionist, died here February 21 following a heart attack.

He had been in ill health for several months.

Dr. Bryan was founder of the UNC School of Public Health's Department of Nutrition in 1946, the year he joined the UNC faculty. He stepped down as chairman in 1969 but continued teaching until 1971.

During the 1940's Dr. Bryan was recognized as one of the nation's most outstanding researchers in the field of nutrition. He came to the University from the U. S. Public Health Service where he had been senior surgeon and director of nutrition for the United Nations Relief and Rehabilitation Administration. Earlier he had been on the faculties of the University of Chicago and Harvard University School of Medicine where he received his M.D. degree.

* * *

If the many holes in present theories of how the brain works are filled in, recent neurobiological discoveries by UNC scientists may help to alleviate

mental deficiencies and even increase the intelligence of the normal man.

But Dr. Edward Glassman, the director of the Neurobiology Program of the University of North Carolina, says that more funding is needed to fill these holes in our knowledge.

Professor Glassman and his collaborator, Professor John Wilson, have for eight years researched chemicals in the brain that may be associated with learning and memory storage.

"With greater neurobiological knowledge," says Dr. Glassman, "we can begin to answer such questions as, 'What is it that the mentally retarded need? What deficient processes of their brains can be improved?'"

According to a recent article in *The New Scientist*, the group's research is the most comprehensive in the world on the role of RNA and protein in brain function. These chemicals are involved in making learning permanent.

The most recent discovery, brought out in the research of Dr. Barry Machlus in the UNC laboratories, is that during a learning experience phosphate attaches to certain proteins in the nucleus of brain cells.

How important this discovery is will remain unknown, says Dr. Glassman, until more is known of this most complex of living organs, the brain. "Dis-

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Administrator

coveries of the type recently found in our labs will remain a mystery," says Dr. Wilson, "unless much more money is made available for basic research in this field."

* * *

Dr. Robert A. Mueller, UNC anesthesiologist and pharmacologist, has received a Faculty Development Award in Clinical Pharmacology from the Pharmaceutical Manufacturers Association Foundation.

The two-year salary grant which becomes effective July 1 will be used to conduct several clinical research projects—investigation of the cardiovascular and respiratory effects of delta-9 tetrahydrocannabinol; assessment of sympathetic nervous system activity in patients with high blood pressure; and analysis of factors critical to the successful administration of anesthetics to patients with high blood pressure.

* * *

Fifty-five Lumbee Indians of North Carolina recently explored the possibility of health-oriented careers on the UNC-Chapel Hill campus.

The Lumbee youth, all freshmen or sophomores at Pembroke State University in Robeson County, N. C., spent the day in discussion on the various careers available and on a tour of the Nursing School and N. C. Memorial Hospital.

Their trip was sponsored by the N. C. Manpower Development Program and funded by the National Urban Coalition and supported by the Recruitment Committee of the UNC School of Nursing. Assistance in tours was given by all the schools in the UNC Division of Health Affairs.

* * *

Dr. Harry T. Phillips has been elected vice president of the newly organized American Association for Comprehensive Health Planning.

One of the founders of the national organization, Dr. Phillips is director of the Training Program for Comprehensive Health Planning in the UNC School of Public Health.

* * *

A unique program to train gynecologists in the new laparoscope technique for sterilization has begun at N. C. Memorial Hospital and UNC School of Medicine.

Since its inception six months ago, more than a dozen North Carolina gynecologists have been taught by Dr. J. F. Hulka and his associates in the UNC Department of Obstetrics-Gynecology, headed by Dr. Charles Hendricks.

Right now Chapel Hill is one of the few training centers of its type in the nation. Johns Hopkins has a similar program but is not nearly as intensive as the UNC program.

As associate director of the Carolina Population Center here in Chapel Hill, Dr. Hulka and his trainers plan to take such a training program around the world. He has already trained physicians from Singa-

pore and Calcutta and has demonstrated the procedure in Cairo.

Funding for the North Carolina program is from state funds assigned to the UNC Department of Obstetrics. The U. S. Agency for International Development will fund the international program.

* * *

Dr. Colin G. Thomas, chairman of the UNC Department of Surgery, was visiting professor of surgery last week at the University of Cincinnati School of Medicine. While at Cincinnati, the UNC professor presented two papers entitled "Intestinal Obstruction of the Neonate and Children" and "Biology of Thyroid Cancer and Its Surgical Implications."

* * *

The following faculty members of the UNC School of Medicine are on leave of absence;

Dr. John B. Graham, professor in the Department of Pathology, is on a six months' leave to write a monograph on "Hemophilia and the Anti-hemophilic Factor" for publication in *Physiological Reviews* and be a visiting professor at St. Thomas's Hospital Medical School and visiting lecturer at the Universities of London and Glasgow.

Dr. Joseph H. Perlmutter, associate professor, Department of Physiology, is on leave to study techniques applicable to his research, principally at the Physiological Institute, Free University of Berlin, Germany, in the laboratories of Dr. Otto H. Gauer.

Dr. Isaac M. Taylor, professor, Department of Medicine, will have his present leave extended until July 1 to develop plans and perspectives for the next phase of his academic work.

* * *

Jack Pool Byrd of Dunn, Henry D. Jefferson, Jr., of Farmville, and Howard Sheldon Schub of Merri-
rick, N. Y., have been named winners of 1972 Morehead Fellowships in Medicine at the University of North Carolina. The fellows, all dean's list students, will enroll in the UNC School of Medicine this fall.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE WAKE FOREST UNIVERSITY

Dr. Frank C. Greiss Jr., professor of obstetrics and gynecology, has been named acting director of that department at the Bowman Gray School of Medicine. The appointment was effective March 1.

He was named to the post following the resignation of Dr. Richard L. Burt, who had headed the department for the past five years. Dr. Burt asked

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Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.

Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction,

patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live *Ascaris* in the mouth and nose. Hypersensitivity reactions

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INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

to be relieved of his administrative duties in order to return to full-time teaching, research, and patient care on the Bowman Gray faculty.

Dr. Greiss, who was appointed to the Bowman Gray faculty in 1960, holds the B.A. and M.D. degrees from the University of Pennsylvania. He is chairman elect of the Section of Obstetrics of the Southern Medical Association and is chairman of the Committee on Obstetric Anesthesia and Analgesia of the American College of Obstetricians and Gynecologists.

He is noted for his research on uterine circulation. It is for this work that he was awarded the 1968 Foundation Prize of the American Association of Obstetricians and Gynecologists.

Dr. Burt has gained international prominence for his research on changes in body chemistry and problems of diabetes during pregnancy.

In 1966 he was appointed chairman of the Department of Obstetrics and Gynecology, succeeding Dr. Frank R. Lock who had headed the department for 25 years. Dr. Burt also has served as director of the department's Section on Reproductive Biology and director of the school's Clinical Research Center.

* * *

Dr. I. Meschan, professor and chairman of the Department of Radiology, was a guest lecturer at the Armed Forces Institute of Pathology recently in Washington, D. C. He spoke on "Radiologic Aspects

of Collagen Diseases," "Bronchopulmonary Dysplasia," "Reticuloendotheliosis of Bone," and "An Analytic Approach to the Roentgen Diagnosis of Bone Diseases." * * *

Dr. John S. Kaufmann, assistant professor of medicine and pharmacology, recently was awarded a Faculty Development Award in Clinical Pharmacology by the Pharmaceutical Manufacturers Association Foundation.

Funds from the grant not only will enable Dr. Kaufmann to pursue his research interests—principally those relating to drugs used in the treatment of cardiovascular and malignant diseases—but also will support him in the further development of the medical school's teaching program in clinical pharmacology.

Dr. Kaufmann was given the responsibility of establishing a clinical pharmacology unit in the Department of Medicine in 1970, when he returned to the Bowman Gray faculty after two years of special training in clinical pharmacology at Vanderbilt University Medical Center.

While the unit is actively involved in the evaluation of drugs and consultation with physicians on drug interactions, Dr. Kaufmann feels that perhaps the most important mission of the unit is the teaching of sound pharmacologic principles to future physicians and researchers.

* * *

The Bowman Gray School of Medicine recently was awarded a \$194,700 grant by the Commonwealth Fund, New York City, to support faculty development in the Department of Community Medicine.

The three-year grant provides for the establishment of three faculty positions within the department and for further development of three community medicine programs — epidemiology, community medicine clerkships, and community medical care.

New faculty members, who will be appointed as a result of the Commonwealth grant, include:

—A director of the epidemiology program who will be responsible for the collection and interpretation of various types of health data for use in community health planning.

—A director of the community medicine clerkship program who will be responsible for coordinating the program which provides opportunities for students to take part of their training in offices of family practitioners, small-town clinics, community hospitals and industrial medicine situations.

—A director of the community medical care program who will serve as a consultant to the Forsyth Health Planning Council in the planning and execution of a program designed to deliver high-quality basic medical care to a community population of approximately 52,000 persons.

* * *

Dr. B. Lionel Truscott, professor of neurology,

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and Dr. Susan Blue, resident in neurology, gave papers at a Cerebral Vascular Workshop recently in Miami, Fla. Dr. Truscott spoke on "Risk Factors and Quality of Survivorship in Cerebral Vascular Disease." Dr. Blue spoke on "Ultrasonic B-Mode Scanning for Study of Extracranial Vascular Disease."

* * *

Dr. Paul M. James Jr., assistant professor of surgery, has been named the winner of a North Carolina State Medical Society award for a paper on "Hyperalimentation" which he presented May, 1971, at the annual meeting of the State Medical Society. He will be presented the Gaston County Medical Society Medal at the 118th meeting of the Society May 21-24 in Pinehurst.

* * *

Dr. George S. Malindzak, associate professor of physiology, has been appointed consultant to the Division of Physicians and Health Professions Education of the National Institutes of Health.

* * *

Dr. Roscoe L. Wall Jr., assistant clinical professor of obstetrics and gynecology, has been elected to a three-year term on the Executive Board of the South Atlantic Association of Obstetricians and Gynecologists.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

A pediatric intensive care unit has been opened at Duke Hospital to provide critically ill children with constant personal and specialized medical care.

According to Dr. Alexander Spock, director of Duke's Pediatric Pulmonary Program, the unit, located on Howland Ward, implements a new concept in the technical management of sick children.

"Patients housed in this intensive care section benefit from a one-to-one nursing ratio plus careful monitoring which permit constant observation and supervision of the patient," Dr. Spock said.

Also, these patients are attended by doctors and nurses who have had special additional training designed to assist children with certain complex and severe illnesses, he added.

The unit accommodates five patients and has been specifically designed to provide care for patients with acute overwhelming respiratory difficulties such as bronchial asthma, pulmonary edema, or diffuse pneumonia.

Other patients who may also benefit from the unit are those suffering from shock, diabetic coma, and drug or poison ingestion, as well as severely burned children, brain-injured patients, critically ill post-operative patients, and those with heart failure.

Third-year medical student Joanne Wilson is the first woman ever elected president of the medical student government Davison Society.

Mrs. Wilson, from Raleigh, has been involved in a variety of student activities including the student-faculty curriculum committee. She is a member of Alpha Omega Alpha, medical student honor society.

Other officers are Martin Schwartz, service vice-president; Robert Lester, social vice-president; Harvey Pass, secretary; and Sandy Williams, treasurer.

* * *

Dr. Frank H. Bassett III, associate professor of orthopaedic surgery, was a guest speaker at the Eastern Athletic Trainers Association Meeting held in Grossinger, N. Y.

Bassett also presented a paper on "Knee Injuries" at the annual meeting of the American Academy of Orthopaedic Surgeons in Washington, D. C.

* * *

Dr. Alan G. Bartel, second-year fellow in cardiology, presented a paper at the American Federation of Clinical Research in New Orleans, La. His topic was "Changes in Treadmill Exercise Following Aorto-Coronary Bypass Graft."

* * *

Four academic appointments have been announced at Duke. Those named to new posts are Drs. Joseph B. Workman, Ruth L. Peschel, Jesse D. Hall and Walter G. Wolfe.

Workman, appointed associate professor of radiology, comes to Duke from a position as associate professor of medicine at the University of Maryland. After receiving his medical degree at the Maryland School of Medicine in 1946, he took his postdoctoral training at University Hospital in Baltimore.

He was also director of the Radioisotope Laboratory at University Hospital.

Peschel was appointed assistant professor in the Department of Medicine. She received her M.D. at the University of Berlin in Germany in 1930. She came to Duke in 1947 as a research assistant in medicine. In 1960, she was named research associate and in 1969 associate in the department.

Hall, a practicing physician in Griffin, Ga., for the last 11 years, was appointed assistant professor of community health sciences. He graduated from Emory University Medical School in 1956 and did his postdoctoral training at New England Center Hospital in Boston and North Carolina Memorial Hospital in Chapel Hill.

Wolfe, a graduate of Temple University Medical School, was named to an assistant professorship in surgery. Following an internship at Philadelphia General Hospital, he served his residency at Duke. In 1970, he was named chief and in July of 1971 was named teaching scholar in cardiac surgery.

* * *

Dr. Joseph A. C. Wadsworth, chairman of the Department of Ophthalmology, attended the meet-

ing of the American Board of Medical Specialties as a representative from the American Board of Ophthalmology in Chicago.

He also recently attended the meeting of the Association of University Professors of Ophthalmology in Key Biscayne, Fla.

* * *

Dr. E. W. Busse, chairman of the Department of Psychiatry, spoke on "What Next for Psychiatry?" at the Midwinter Meeting of the Colorado Psychiatric Society in Vail, Colo.

Two days later, Dr. Busse addressed the Department of Psychiatry at the University of Colorado Medical Center. His talk was entitled "Social Issues and Geriatric Psychiatry."

* * *

Dr. Banks Anderson, Jr., associate professor of ophthalmology, attended the Pan Pacific Surgical Association meeting in Hawaii.

* * *

In an attempt to bridge the "adolescence gap" between childhood and maturity, Duke has established an Adolescence Clinic.

The clinic is aimed at young people who are at that in-between age and unsure whether to see a pediatrician or see an internist.

Directed by Pediatrician Sam Yancy, the clinic is supported by the departments of psychiatry, internal

medicine, and obstetrics-gynecology in addition to pediatrics.

"The emphasis," Dr. Yancy explained, "is on behavioral orientation, or what is called the 'second diagnosis'."

This "second diagnosis," he explained, grows out of a legitimate physical complaint "which is a ticket into the doctor's office to discuss the real problem."

As an example, he said, obesity might be the physical problem, but it could be only a reflection of an emotional problem that expresses itself in over-eating.

"Drugs can be another big problem," the doctor said, "but drug-taking really can be a symptom of many other things, such as socioeconomic factors or disharmony in the home."

Gestures of suicide are another area of concern for the Adolescence Clinic. "It's important," Dr. Yancy said, "to recognize what brought about the attempt and to point these people in the direction of some help."

Dr. Yancy explained that while the clinic is behavior oriented, this does not mean to imply that all problems or complaints involving patients in the 12 to 18 group are emotional or behavior problems.

"We're trying to find the mid-point where we can direct them toward help, whether it's psychiatric, psychological, or medical help that's needed," he said.

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Dr. Nicholas G. Georgiade, professor of plastic and maxillofacial surgery, presented a paper on "Salivary Gland Tumors" at the chapter meeting of the American College of Surgeons in San Juan, Puerto Rico.

He addressed the Puerto Rico Society of Plastic Surgeons on "Nasal Deformities and Their Reconstruction."

* * *

Dr. Rebecca H. Buckley, assistant professor of pediatrics and immunology, participated in the Symposium on Asthma at Children's Hospital of Stanford University in Palo Alto, Calif.

The following day she went to San Francisco to give a seminar on "Immunologic Reconstitution" at the annual meeting of the American Academy of Allergy.

Dr. Buckley was also recently named a member of the board of examiners of the newly-formed American Board of Allergy and Immunology.

* * *

Dr. Guy L. Odom, professor and chairman of the division of neurosurgery, attended a meeting of the American Board of Medical Specialties held in Chicago.

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

F. M. Simmons Patterson, M.D., executive director of the North Carolina Regional Medical Program, has announced the appointment of Dr. Charles G. Oakes as director of the Division of Planning and Evaluation. Dr. Oakes, who is currently associate professor and chairman of the Sociology Department at Converse College in Spartanburg, South Carolina, will assume the position as of June 1.

Prior to his appointment at Converse College in 1966, Dr. Oakes was assistant professor and chairman of the Sociology Department of Southwestern-at-Memphis. While in Memphis he also served as a lecturer in preventive medicine at the University of Tennessee College of Medicine. He attended the University of California at Berkeley and Stanford University in Palo Alto, California, and received his doctorate in sociology from Emory University in Atlanta.

Dr. Oakes has done extensive research in various areas related to health care and health care delivery, and his publications include several books and articles in the fields of health care and gerontology. He has served as Chairman of the Committee on the Profession of the Southern Sociological Society. He is a member of the New York Academy of Sciences

and has been elected to the Society of the Sigma Xi for research in bio-physics conducted at the Donner Laboratory of the University of California at Berkeley.

Dr. Oakes is listed in *Who's Who in the South and Southwest*, *Who's Who in College and University Administration*, and *American Men of Science: Social and Behavioral Sciences*. He recently received a certificate for advanced study in health policy from the Brookings Institution in Washington.

* * *

In August, 1971, Dr. Frank Sohmer accompanied the North Carolina group on site visits to the San Joaquin Medical Foundation of Stockton, Cal., and the Sacramento Medical Care Foundation of Sacramento, Cal., as a representative of the Forsyth County Medical Society.

Information obtained at the site visit was presented to the society, which subsequently established a Health Care Delivery Committee with Dr. Sohmer as chairman. This Committee recommended to the society the establishment of a medical foundation principally directed to the area of peer review, and this concept was approved by the Society.

On February 11-13, 1972, about six months after the site visit, the Forsyth County Medical Society, in cooperation with the North Carolina Regional Medical Program, sponsored a three-day seminar on Medical Foundations, with representatives of the two California foundations in attendance.

These representatives were Dr. Donald C. Harrington, medical director of the San Joaquin Medical Foundation, and Mr. Bleeker Cook, executive director of the Sacramento Medical Care Foundation. Also present was Mr. Alec McMahon of North Carolina Blue Cross-Blue Shield. A total of about 50 individual physicians and consultants attended the seminar, which was held in the Albert Pick Motor Inn at the Greensboro Airport.

The Health Care Delivery Committee's seven subcommittees, numbering 50 physicians, were expected to complete their work by mid-March and report back to the Society. By July 1, 1972, the Society expects to implement those parts of the foundation which are applicable to their society and community. For the Forsyth County Medical Society, the seminar has been just one step, though a very important one, in the process of determining how best to provide health care for the residents of their county.

* * *

The North Carolina Regional Medical Program is funding a two-phase program in emergency medical services. The first phase, to be administered by the North Carolina Hospital Association, will be two one-day regional conferences on April 19 and 20 to review current problems in emergency health services, and to set priorities for dealing with these problems in light of available resources.

Those invited to attend these conferences, which

will stress community-based solutions, will include hospital trustees, hospital administrators, physicians, representatives of the State Health Department, American College of Surgeons, the North Carolina State Medical Society, the North Carolina Nurses Association, ambulance and rescue squad groups, medical schools, and other agencies and individuals concerned with emergency medical services.

The second phase of the program will provide training to approximately 20 hospital teams of emergency room nurse supervisors and physicians responsible for coordinating hospital emergency services. This program will be coordinated by James E. Camp, Assistant Director of the North Carolina Hospital Association. It will be held in the UNC School of Medicine and directed by Dr. George Johnson, professor and chief of the Division of Vascular Surgery, UNC School of Medicine. The course will last ten days for nurses and two days for the physician during the same time span.

* * *

The fifth annual North Carolina Diabetes Association meeting which was held on Friday, April 14 in Winston-Salem, featured two special programs, one for NCDA members and one for physicians. The sessions were held at the Bowman Gray School of Medicine, followed by a social hour and banquet. Speakers for the physicians' session were John K. Davidson, M.D., Ph.D., "Variations in Response to

Insulin Therapy"; James M. Moss, M.D., "The Effect of Oral Hypoglycemic Drugs on Longevity"; and T. S. Danowski, M.D., "The Significance of Mild Glucose Intolerance." The panel following was moderated by Emery C. Miller, M.D.

Mrs. Virginia Coyle then gave a slide presentation of "Select-A-Meal" to those present. The upcoming fund drive is expected to facilitate NCDA's transition to a completely self-supporting organization. The primary method of soliciting funds is a booklet depicting the full program which the NCDA hopes to continue; many of the activities have been made possible by the NCRMP project.

* * *

The NCRMP, in cooperation with the Bowman Gray, Duke, and UNC schools of medicine, has developed a project which will provide health care personnel in local areas with personalized consultant services. The main thrust will be on the local physician expanding his own effectiveness by discussing with the consultant, patients they see together. In some cases this individual consultant may be supplemented by an informal breakfast group presentation or a small dinner meeting.

Consultation is not limited to specified fields or topics, but should be related directly to the improvement of health care services. The inclusion of nurses and allied health personnel is encouraged where possible and appropriate. In such a case, consultation

SAINT ALBANS PSYCHIATRIC HOSPITAL

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James P. King, M.D., Director

William D. Keck, M.D.
Clinical Director
Morgan E. Scott, M.D.

David S. Sprague, M.D.
James E. Dublin, Ph.D.
Edward E. Cale, M.D.

Don L. Weston, M.D.
J. William Giesen, M.D.
Delano W. Bolter, M.D.

Clinical Psychology:

Thomas C. Camp, Ph.D.
Card McGraw, Ph.D.
David F. Strahley, Ph.D.

Don Phillips, Administrator
R. Lindsay Shuff, M.H.A.
Asst. Administrator

AFFILIATED CLINICS

Bluefield Mental Health Center
525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
Leslie J. Borbely, M.D.

Mental Health Clinic
Professional Building, Wise, Va.
Pierce D. Nelson, M.D.

might be furnished by a team which would include professionals from the respective disciplines of persons to whom consultation would be provided.

Requests will be accepted from groups such as a community hospital staff, a group practice of three or more physicians, or a number of solo practitioners so situated that they can be seen in one day by a consultant moving from one physician's office to another. Applicants may request a specific consultant, or ask that consultation in a certain specialty area be provided.

The usual consultation period will be one or one and one-half days. Current funding will carry the project to July 1, 1972. Requests for consultant services or for more information may be directed to Ron W. Davis, Director, Continuing Education, North Carolina Regional Medical Program, P. O. Box 8248, Durham, N. C. 27704.

NATIONAL INSTITUTE OF MENTAL HEALTH

The National Institute of Mental Health is exploring a new approach in the fight against drug abuse—psychological substitutes to drug addiction.

The project, called "Alternative Pursuits for America's Third Century," will seek those substitutes by encouraging communities to devise innovative programs and activities to turn people away from drugs by fulfilling some of the needs that drive them to drugs.

"We hope to focus the skills, energy, and ideas of people all over the country on discovering innovative pursuits and resources to meet human needs and make life more rewarding," said Dr. Bertram S. Brown, NIMH director and special assistant to the Secretary for Drug Abuse Prevention.

"It is obvious, said Dr. Brown, that efforts to combat drug abuse are futile unless we expand opportunities for young people and adults to find satisfaction and meaning in today's world."

NIMH plans to stimulate ideas and designs for these activities and organize a national collaboration to give communities experience in determining alternatives. A conference will be held in June at Warner Hot Springs, Calif.

Information about participation in this project can be obtained from Alternative Pursuits, P. O. Box 861, Del Mar, Calif. 92014.

AMERICAN RHEUMATISM ASSOCIATION

The American Rheumatism Association Section of The Arthritis Foundation is offering a Review Session in Rheumatology mainly for physicians wishing to take the subspecialty examinations for certification in Rheumatology being given for the first time this year by the American Board of Internal Medicine on October 17, 1972.

The Review Session will take place on Saturday,

June 10, 1972 at the Fairmont Hotel in Dallas, Texas in conjunction with the annual meeting of the American Rheumatism Association.

Registration fee for the session is \$50.00 (including luncheon). Please send reservations to: The Executive Secretary, American Rheumatism Association Section, The Arthritis Foundation, 1212 Avenue of the Americas, New York, New York 10036 no later than May 25, 1972. Make checks payable to The Arthritis Foundation.

AMERICAN COLLEGE OF PHYSICIANS

Eight physicians from North Carolina have recently been granted membership in the American College of Physicians. They are Lieut. Comdr. Richard Wenzel, MC USNR, Camp Lejeune; Drs. Robert L. Fenning and Richard T. James, Jr., Charlotte; Dr. Robert M. Wilkins, Durham; Dr. Martin A. Hatcher, Jr., Greensboro; Dr. George W. Joyce, High Point; Dr. Robert W. Harding, Rutherfordton; and Dr. James E. Hunter, Thomasville.

The College dedicates itself to upgrading medical care, teaching, and research through stringent standards of membership and programs of continuing education.

NEW HEALTH TEAM PROFESSIONALS

In a day of an ever-increasing need of specialization and professionalization, another area lacking in such attainments has been considered and now successfully brought into being. The medical representative, the most widely used and certainly the most effective means of promoting pharmaceuticals, has for many years desired to attain the professional status he deserves. He enters the pharmaceutical world with a college degree, receives in-depth training commensurate with the line of products marketed by his firm, participates in a continuing educational program during his entire employment career. He is qualified to fill his responsibilities, but unfortunately still lacks the recognition essential to a true professional. Now this has changed with the advent of a testing institute organized in 1966. The Certified Medical Representative Institute serves the entire pharmaceutical industry as a non-profit, tax exempt, educational and testing firm.

Among its goals is the awarding of the C.M.R. (Certified Medical Representative) designation to every medical representative who desires to qualify by submitting himself to a series of examinations and thus prove his competency to the entire medical community. The C.M.R. designation following a person's name denotes a professional and testifies to competency in the knowledge and proper usage of drugs in all fields of medicine.

In order to participate in the testing program of the C.M.R. Institute, a medical representative must

be in the employ of a pharmaceutical company which financially supports the Institute through an annual membership fee and a registration fee for those of their representatives who elect to participate. The additional costs incurred for the educational materials and the actual testing is usually shared with the representative.

At present the following companies are affiliated with the Institute: CIBA Pharmaceutical Company, Dorsey Laboratories, Knoll Pharmaceutical Company, Ortho Pharmaceutical Corporation, A. H. Robins Company, Inc., Syntex Laboratories, Inc., USV Pharmaceutical Corporation, Warner-Chilcott Laboratories, and Warner-Chilcott Laboratories Co., Limited (Canada).

The C.M.R. designation is awarded at the completion of 30 credits of course work, which is all accomplished in a home study program. The time involved varies from two to five years, depending on the candidate's previous education in the biological science field, and the amount of free time he is able to devote to this program. It must be appreciated that each candidate is working full time and is usually married and has family responsibilities as well.

Fifteen course credits are in required subjects: anatomy, physiology, pharmacology, medical terminology, and government regulations. For the remaining 15 credits, students may choose from the following elective courses: biochemistry, microbiology, psychology, ethics, history of the pharmaceutical industry, economics, research methods, and pharmaceutical marketing.

Knowing that all ethical pharmaceutical companies insist on a very high standard of excellence in their representatives, and that many men enter into this work with a college degree in biology or pharmacy, the Institute is prepared to examine these candidates without requiring them to utilize the materials supplied by the Institute. It is possible for a student to be tested immediately, and if he passes he receives that many credits toward certification.

Thus far more than 450 men have completed the program and have received the C.M.R. designation. The increase in student enrollment is evidenced at the beginning of each semester as more pharmaceutical companies become affiliated with the program and as a greater percentage of medical representatives enroll.

Examinations are prepared under the direction of psychological consultants and written by authors of the texts utilized in the program. The tests are given twice a year, in January and June, at 52 different schools of medicine and pharmacy across the United States.

The failure rate is between 15% and 20%, depending on the particular course. The dropout rate is about 3%. Considering that most of the students are already college graduates and have been extensively prepared in specific areas of pharmacology and related fields by their employers, the failure rate is understandably low. The dropout rate is exceedingly low, because entrance into the certification program is voluntary.

Women have symptoms [of syphilis] peculiar to the sex; as cancers of the breast; a suppression or overflowing of the menses; the whites; hysteric affections; an inflammation, abscess, schirrus, gangrene, cancer, or ulcer of the womb; they are generally either barren or subject to abortion; or, if they bring children into the world, they have an universal erysipelas, are half rotten, and covered with ulcers.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 348.*

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They're men the local citizens and local doctors and hospitals know. And trust. They're there when they're needed. Because it's their home, too.

We're proud of Ralph Brake of Rowland. And the 75 other Blue Cross representatives who serve you in cities and towns large and small all across North Carolina. Serving you is their job. And ours. We're where you live.

**Serving you is our
only business.**



NORTH CAROLINA BLUE CROSS AND BLUE SHIELD, INC.

Month in Washington

The Senate Finance Committee has completed public hearings on the catch-all Social Security amendments bill (H.R. 1) and is expected to approve legislation soon containing important peer review changes in Medicare and Medicaid and a national catastrophic protection plan.

As approved by the House last spring, the bill was much the same as the one that went through the previous congress only to be stalled when there wasn't time at the end of the session to reconcile differences in the House and Senate versions.

The bill before the committee would:

- * Authorize health maintenance organization (HMO) experiments.
- * Extend Medicare to disabled Social Security beneficiaries. Authorize experiments with peer review mechanisms.
- * Restrict physicians' fee increases to a cost-of-living index.
- * Give the HEW Department stronger policing powers over abuses.
- * Authorize experiments with prospective payments to institutions.

The committee appears certain to add two major provisions. One would institute a sweeping catastrophic protection plan for all Americans administered by Social Security; the other is the professional standards review organization (PSRO) plan under which groups of physicians including medical societies and foundations would have first opportunity to set up monitoring programs for Medicare and Medicaid in their areas.

In a statement filed with the Senate Finance Committee, the American Medical Association commented on a number of provisions of the proposed legislation. With respect to the catastrophic protection plan, the AMA advised against its adoption, saying: "We believe that catastrophic coverage, to achieve its purpose, must be tied in with adequate basic coverage in order to afford the best range of protection." The Association recommended in its place that the basic and catastrophic provisions of its own Mediredit proposal be adopted by the Committee.

The Association supported provisions in H.R. 1 authorizing the Secretary to conduct experiments in community-wide peer review programs. It pointed to the many peer review activities presently ongoing, noting that under the experimental authority various

programs, including those with professional standards review organization (PSRO) features, could receive necessary broad-scale experimentation. It stressed the need for further research and experimentation, cautioning against the adoption of a single nationwide program.

"If enacted," the AMA said, "PSRO would lock peer review into one single, untested, nationwide program, with unpredictable consequences. On the other hand, many valuable benefits can be gained through appropriate experimentation. H.R. 1 (prior to the PSRO amendment) provides authority to the Secretary of HEW to conduct such experiments in community wide peer review programs, and we believe it would be wise to implement this authority before any single overriding plan is adopted."

With respect to the Health Maintenance Organization (HMO) provision of the bill, the AMA statement noted that under separate legislation "an effort is under way to bring HMO's into existence without evidence of their economic justification or viability without continuing federal subsidy after being established." The AMA said that "before any such program is initiated nationwide and is held out as a realistic benefit available to beneficiaries under the Medicare program, it is our recommendation that cost and utilization data first be developed.

"Besides the consideration of whether the HMO provision will in fact result in cost savings to the program, there is the paramount consideration of the health care which will be provided to the beneficiary. We are not alone in expressing serious concern about a program which provides incentives to providers for lower utilization of benefits, and this aspect of the program—under-utilization—must be watched very closely so that the beneficiaries receive the best quality care. There are many additional questions to be resolved concerning the efficacy of this form of contract medicine. Moreover, it is important that the control and operation of the HMO be under the direction and supervision of physicians so that high quality care is provided. Operation of the health maintenance organizations under the direction of individuals or groups not competent in the health field should not be sanctioned."

The AMA statement also:

- * Opposed the proposed Medicare limits of 75 percent on prevailing charge levels, stating "we know of no such direct statutory limitations on

prices, wages or charges in other private sectors of the economy."

- * Opposed as "unjustifiably repetitive" a further study of inclusion of chiropractic benefits under Medicare.
- * Said needy disabled should be covered under Medicaid rather than included in toto under Medicare and thus changing the concept of Medicare as a program for those over age 65.
- * Opposed any federal restrictions on drugs physicians may prescribe for patients covered under federal programs.
- * Urged the Committee to extend for five years maternal and child health programs of social security.

* * *

A cabinet-level department of health is slated to receive a serious push in congress this year, though time won't permit enactment. Rep. Paul Rogers (D., Fla.) influential chairman of the House Health Subcommittee, plans to introduce legislation and hold hearings.

Impetus to the drive could come from the Democratic Party's National Convention where a party plank provision may endorse the health department idea.

However, the Administration opposes the plan.

President Nixon's moribund cabinet reorganization plan moves in the opposite direction, calling for the Health, Education and Welfare Department to be changed to a Department of Human Resources with added welfare programs from Labor and Agriculture Departments lumped in.

There is no question, however, from the standpoint of size and importance that health ranks a cabinet spot. Federal outlays for health next fiscal year are put at \$25.5 billion, 10.3 per cent of all federal expenditures. However, Administration supporters argue it makes sense to contain within one umbrella most programs involving health and welfare as they are intimately connected and need single supervision. Education isn't quite so related, but there hasn't been much pressure to separate this function which ranks third in spending at HEW (about \$6 billion) and fits in as well at HEW as anywhere else.

Backers of a health department contend that health gets short changed because it doesn't have cabinet clout. Rogers argues that health is an administrative mishmash and that as a result the White House Office of Management and Budget is the real maker of health policy. "The federal health establishment is entitled to have a full-time secretary of health who can be heard in the White House over the guilotine of the Office of Management and Budget," Rogers declared in a speech last fall.

Book Review

Pediatric Therapy. Edited by Harry C. Shirkey, M.D. Edition 4. 1,221 pages. Price, \$34.50. St. Louis, Missouri: The C. V. Mosby Company, 1972.

This excellent book is difficult to review. While it is primarily devoted to therapeutics, it has many aspects of a textbook of pediatrics. The general concepts of treatment of children are well covered and should be read by any physician who treats children. This applies to the well-being of the child as well as the protection of the physician, who is increasingly liable for errors in pediatric therapy.

Each section is discussed by an authority in the area of therapeutics involved. It is emphasized that each section reflects the opinion of the author of that section, and that there may be disagreement with other concepts. This reviewer has read the sections

in which he is particularly interested and can find no serious fault with the discussions.

In the opinion of the reviewer, the book attempts to cover areas which are of little interest to pediatricians and family physicians. This results in a long and expensive book.

This book should be in every hospital where children are treated. It would be of inestimable value to the family physician who cannot obtain consultations. Certainly it is almost a necessary volume for the pediatrician who is practicing in an area remote from a teaching institution.

This is an excellent book, and one only wishes that it might have been condensed so that the price would not be so forbidding.

WESTON M. KELSEY, M.D.

In Memoriam

George Lunsford Carrington, M.D. 1893-1972

George Lunsford Carrington, M.D., was born in Durham, N. C. Jan. 24, 1893. He received his undergraduate degree at the University of North Carolina. He received a master's degree in chemistry and zoology at Trinity College (now Duke University). At the University of North Carolina he received part of his medical training and received his M.D. degree at Johns Hopkins University. He also interned at Johns Hopkins and took his residency in surgery at Yale Medical Center and at Bryn Mawr Hospital in Philadelphia.

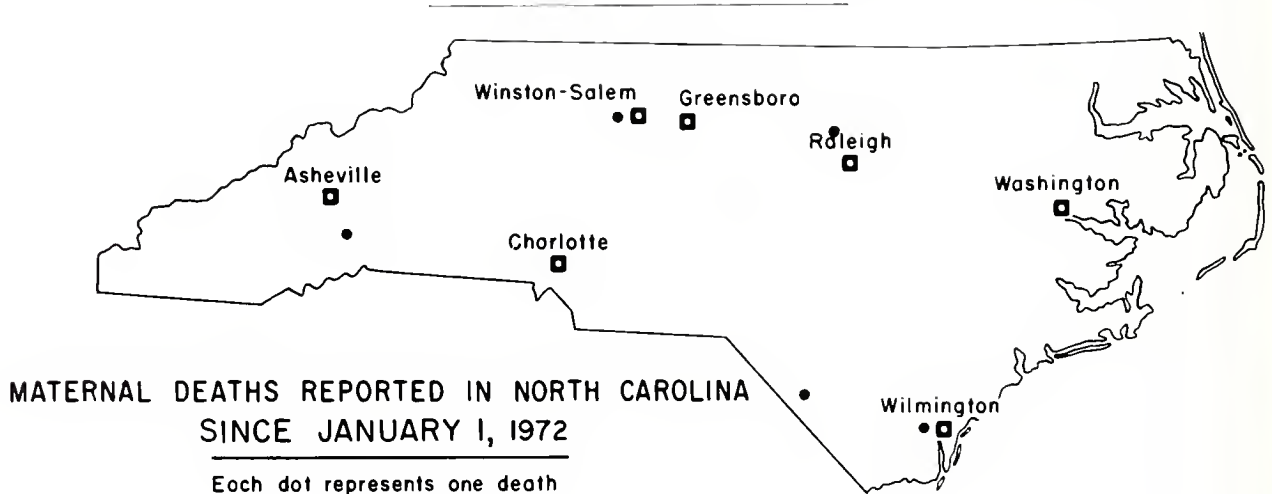
Dr. Carrington started his practice of surgery in Durham, and later moved to Burlington in 1929. He practiced surgery in Burlington until his retirement in 1971. He was associated with the Alamance General Hospital and the Memorial Hospital of Alamance County. He was a member of the Alamance-Caswell County Medical Society, the North Carolina State Medical Society, the Southern Medical Society, the Association of Southern Railway Surgeons, a fellow of The American College of Surgeons, and a diplomate of The American Board of Surgeons. Locally he was an active member in the Burlington Rotary Club.

He was the author of numerous articles published in medical journals. He was an avid scholar, being widely read in many subjects including surgery. He received the University of North Carolina Distinguished Service Award in 1955 for his contributions to medicine, being the first in his class to do so. He received his 50-year pin for service about one year ago from the State Medical Society. He donated generously through the years to educational, medical, and religious causes.

WHEREAS his family, his friends, his colleagues, and former patients have sustained a great loss, nonetheless his intellectual scholarship, his healing touch of a superb physician, his skill as a master surgeon, and his self discipline will be remembered by them.

Resolved that in respect and grateful acknowledgment of his contribution to the medical profession that the Alamance-Caswell County Medical Society express our deepest sympathy to his widow, Mrs. Elizabeth Scott Carrington, and that a copy of this resolution be placed on the record of the county medical society and a copy be forwarded to The Medical Society of The State of North Carolina, and a copy to his widow.

ALAMANCE-CASWELL COUNTY MEDICAL SOCIETY



Medical Society of the State of North Carolina

SECOND ANNUAL SYMPOSIUM ON SPORTS MEDICINE

BLOCKADE RUNNER
WRIGHTSVILLE BEACH, N. C.

July 2-4, 1972

AAFP CREDIT BEING REQUESTED TENTATIVE PROGRAM

Sunday, July 2

- 4:00- 6:00 P.M. Registration — Lobby
6:30 P.M. Shrimparoo — Patio — Informal

Monday, July 3

Moderator: Frank C. Wilson, Jr., M.D.

- 8:30- 9:00 A.M. Registration — Lobby
9:00- 9:15 A.M. Introduction Frank C. Wilson, Jr., M.D.
9:15- 9:30 A.M. Relationships of Athletics to the School System.....Raymond K. Rhodes
9:30-10:00 A.M. Legal Liability in High School Athletics.....John T. Hayes, M.D.
10:00-10:30 A.M. Physical Examination of the Athlete.....James R. Dineen, M.D.
10:30-11:00 A.M. Coffee Break
11:00-11:30 A.M. Conditioning of the Athlete.....John Lacey
11:30-12:30 P.M. Taping and Strapping Demonstration.....Frank H. Bassett, III, M.D.
8:30 P.M. Dinner (coat and tie) — Lee Room
Guest Speaker: Homer Rice
Director of Athletics, University of North Carolina

Tuesday, July 4

Moderator: Frank W. Clippinger, Jr., M.D.

- 9:00- 9:30 A.M. Use and Misuse of Local Anesthetics.....Basil M. Boyd, M.D.
9:30-10:00 A.M. Heat Syndrome Joseph L. DeWalt, M.D.
10:00-10:30 A.M. Tendon and Ligamentous Injuries.....Donald B. Reibel, M.D.
10:30-10:45 A.M. Coffee Break
10:45-11:15 A.M. Epiphyseal Injuries in the Athlete.....H. Robert Brashear, M.D.
11:15-11:45 A.M. Injuries of the Hand and Wrist.....John W. Packer, M.D.
11:45-12:15 P.M. Rehabilitation of the Athlete.....Richard N. Wrenn, M.D.

Sponsored by: Committee on Medical Aspects of Sports
ADVANCE REGISTRATION REQUESTED

**TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
JANUARY 1972 AND MOST RECENT 12-MONTH TOTALS**

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	PERINATAL DEATHS		Total Deliveries	Perinatal Rate	Per 1,000 Deliveries	PERINATAL DEATHS		Total Deliveries	Perinatal Rate	Per 1,000 Deliveries		PERINATAL DEATHS		Total Deliveries	Perinatal Rate	Per 1,000 Deliveries					
	January 1972	February 1971 - January 1972				January 1972	February 1971 - January 1972					January 1972	February 1971 - January 1972								
ENTIRE STATE	140	1741	67841	25.7		99	1263	28945	43.6												
ALAMANCE	2	36	1239	29.1		2	17	428	39.7		PENDER	1	3	152	-		2	145	-		
ALEXANDER		14	329	42.6			1	36	-		PERQUIMANS		1	67	-			53	-		
ALLEGHANY		2	118	-				7	-		PERSON	1	7	280	25.0		9	228	39.5		
ANSON	1	6	193	31.1		1	14	275	50.9		PITT	2	20	644	31.1	2	16	649	24.7		
ASHE	1	10	302	33.1				2	-		POLK		2	145	-		1	28	-		
AVERY		12	242	49.6							RANDOLPH	3	42	1249	33.6		6	116	51.7		
BEAUFORT	3	11	411	26.8		1	13	241	53.9		RICHMOND	1	13	448	29.0		13	280	46.4		
BERTIE		8	94	-			10	237	42.2		ROBESON		14	637	22.0	3	57	1658	40.4		
BLADEN		5	243	20.6			7	207	33.8		ROCKINGHAM	2	31	1035	30.8	3	23	414	55.6		
BRUNSWICK		3	358	-		1	9	167	53.9		ROWAN	3	25	1188	21.0	1	15	326	46.0		
BUNCOMBE	4	61	1993	30.6		1	19	287	66.2		RUTHERFORD	2	23	706	32.5		5	161	31.0		
BURKE		23	1026	22.4			8	82	-		SAMPSON	2	5	426	11.7		19	337	56.4		
CABARRUS	1	18	995	18.1			6	317	18.9		SCOTLAND	2	13	320	40.6	1	12	306	39.2		
CALDWELL	1	20	1063	18.8		1	4	105	-		STANLY	1	17	649	26.2		7	121	57.9		
CAMDEN	1	5	61	-				40	-		STOKES	2	8	363	22.0		3	65	-		
CARTER		14	525	26.7		1	1	78	-		SUPPLY	2	37	871	34.4		2	49	-		
CASWELL	1	9	160	56.3		2	11	176	62.5		SWAIN			121	-		1	58	-		
CATAWBA	5	49	1554	31.5		2	9	229	39.3		TRANSYLVANIA		13	286	45.5			31	-		
CHATHAM		10	338	29.6		1	7	165	42.4		TYRRELL		1	21	-		3	34	-		
CHEROKEE	2	9	267	33.7			1	11	-		UNION	1	19	776	24.5	3	24	350	68.6		
CHOYAN		3	89	-			3	109	-		VANCE		6	327	18.3		13	343	37.9		
CLAY		2	86	-							WAKE	2	72	2993	24.1	2	40	1022	36.6		
CLEVELAND	6	39	1019	38.3		5	16	390	41.0		WARREN		2	71	-		9	181	49.7		
COLUMBUS	3	21	549	38.3		2	13	367	35.4		WASHINGTON		2	129	-	2	16	142	112.7		
CRAVEN	1	32	1193	26.8		1	19	396	48.0		WATAUGA		17	348	28.7		1	7	-		
CUMBERLAND	9	77	3884	19.8		2	66	1633	40.4		WAYNE	6	36	1183	30.4	2	27	620	43.5		
CURRITUCK		1	75	-				40	-		WILKES	1	29	540	24.5	4	4	99	-		
DARE		3	101	-				8	-		WILSON	2	17	485	20.6		17	539	31.5		
DAVIDSON	4	42	1564	26.9		1	17	258	65.9		YADKIN	3	12	372	32.3		25	-	-		
DAVIE	1	9	300	30.0		1	3	72	-		YANCEY	1	6	199	30.2		2	-	-		
DOUGLAS		8	427	18.7		2	11	307	35.8		Cities										
DURHAM	2	38	1353	28.1		5	44	940	46.8		City totals are also included in county totals										
EDGECOMBE		7	415	16.9		1	21	507	41.4		ALSEMARLE		2	155	-		1	34	-		
FORSYTH	2	50	2558	19.5		1	37	1205	30.7		ASHEBORO		5	206	24.3			25	-		
FRANKLIN		3	188	-		2	16	239	66.9		ASHEVILLE	2	23	627	36.7	1	19	259	69.5		
GASTON	5	63	2605	24.2		5	20	477	41.9		BURLINGTON	2	17	303	33.9		6	147	40.8		
GATES	1	2	57	-		2	4	79	-		CHAPEL HILL	1	9	274	32.8		2	62	-		
GRAHAM		2	111	-				7	-		CHARLOTTE	6	59	2993	20.4	3	88	2261	42.7		
GRANVILLE	2	14	217	64.5			21	319	65.8		CONCORD		5	195	25.6		3	120	-		
GREENE		6	82	-			8	114	69.0		DURHAM	1	23	812	28.3	3	37	631	44.5		
GUILFORD	5	85	3541	24.0		5	72	1665	43.2		EDEN		7	206	34.0	1	2	59	-		
HALIFAX	1	13	415	31.3			29	594	48.8		ELIZABETH CITY		4	121	-		1	173	-		
HARNETT	1	11	625	17.6		1	25	299	33.6		FAYETTEVILLE	6	22	1111	21.8		39	615	63.4		
HAYWOOD	2	17	681	25.0				15	-		GASTONIA		24	745	32.2	1	7	239	29.4		
HENDERSON	1	23	706	32.6				43	-		GOLDSBORO		9	293	30.7		11	253	41.8		
HERTFORD	1	1	138	-			16	242	61.1		GREENSBORO	2	43	1729	24.9	5	48	1075	44.7		
Hoke		2	123	-			2	13	233	55.8	GREENVILLE		9	255	31.4		4	190	-		
HYDE		4	42	-		1	4	58	-		HENDERSON	3	14	309	45.3	2	4	114	-		
IREDELL	2	27	955	28.3		3	15	336	44.6		HICKORY		2	150	-		5	145	34.5		
JACKSON	1	8	282	28.4			2	59	-		HIGH POINT	2	22	780	28.2		18	418	43.1		
JOHNSTON	3	16	776	20.6			20	305	65.6		JACKSONVILLE	2	12	392	30.6		2	69	-		
JONES			85	-			3	93	-		KINSTON	1	7	243	28.2		14	210	63.9		
LEE	1	9	439	20.5		1	9	186	48.4		LENOIR		3	187	-		2	47	-		
LENOIR	1	17	545	31.2			28	436	64.2		LEXINGTON	1	12	255	47.1	1	6	92	-		
LINCOLN	16	550	29.1			1	4	113	-		LUMBERTON		4	220	-	1	10	195	51.3		
MCDOWELL	2	14	522	26.8			2	62	-		MONROE		1	132	-	1	9	106	84.9		
MACON	2	5	224	22.1				8	-		MORGANTON		6	126	47.6		2	26	-		
MADISON	1	13	243	53.5				3	-		NEW BERN	1	4	165	-	1	9	141	56.7		
MARTIN		1	212	-		4	12	255	47.1		RALEIGH	1	4	1400	28.6	1	30	567	52.9		
MECKLENBURG	7	86	4673	18.4		3	100	2383	42.0		REIDSVILLE	1	3	151	-		8	124	76.9		
MITCHELL		3	215	-				1	-		ROANOKE RAPIDS	1	6	203	28.6		3	38	-		
MONTGOMERY		4	244	-			6	110	50.4		ROCKY MOUNT E		1	100	-	1	5	130	-		
MOORE	1	16	462	34.6		3	14	254	55.1		ROCKY MOUNT N	1	4	225	-	1	6	99	-		
NASH	2	10	505	18.8		1	12	508	23.6		SALISBURY	2	4	187	-		5	120	36.0		
NEW HANOVER		31	1277	24.3		2	17	463	36.7		SANFORD		3	164	-	1	5	80	-		
NORTHAMPTON		2	96	-			14	314	44.6		SHELBY	1	9	169	53.3	1	3	103	-		
ONSLOW	5	57	2374	24.0			11	417	26.4		STATESVILLE		7	220	31.8	3	9	171	46.8		
ORANGE	4	19	763	24.9			17	256	72.0		THOMASVILLE		7	216	32.4		8	94	-		
PAWLICO		2	64	-		1	3	71	-		WILMINGTON		17	577	29.5	1	16	390	40.2		
PASQUOTANK		9	266	33.8			4	177	-		WILSON		3	235	-	3	8	246	32.5		
											WINSTON SALEM	1	24	1209	19.8	1	35	1141	30.7		

¹ Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

The Official Journal of THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA ☐ ☐ May 1972, Vol. 33, No. 5

NORTH CAROLINA

Medical Journal

IN THIS ISSUE: Brown Recluse Spider Bite, Mary Ann Hampton Taylor, M.D., and A. Thomas Olive, Ph.D.; The Physiological Basis of Acupuncture Therapy, Philip M. Toyama, M.D., and Michimasa Nishizawa; Patterns of Patient Utilization in a Volunteer Medical Clinic, John S. Hugues, Duncan L. McRae, and Donald L. Madison, M.D.; North Carolina Cancer Registry, Thomas J. Vitaglione, Joseph A. Buckwalter, M.D., and James F. Newsome, M.D.



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The negative power of undue anxiety
in congestive heart failure...

This man thinks he can no longer
take breathing for granted.



PRESIDENT'S NEWSLETTER

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

No. 12

May 1, 1972

In this communication, my last Newsletter, I must take this opportunity to thank the general membership for the excellent co-operation and friendly spirit extended to me during the year. This prevailing attitude of Society members has made the year a pleasure indeed.

We have been active in many areas but particularly progress has been made in Peer Review, third party relationships, education in the membership for mechanisms of health care delivery, access to medical care, government programs and national health insurance, programs that have to do with improvement in medical practice, mental health, student membership, various aspects of public relations, particularly in mutual studies with the hospital association, drug abuse counseling and family planning, sports, and many others.

A great deal of work is done in the Medical Society that does not reach the membership in the heavy schedule of the Mediation Committee whose work is usually confidential. The Society acts as consultant to many agencies, committees, and commissions, commonly on very short notice. Efforts are maintained to be aware of all health activities that occur in the state and on the national scene so that advice and consultation may be given before programs go into effect.

Communications in the Medical Society are becoming more effective. The Society has several mechanisms by which it attempts to inform its membership as follows: the North Carolina Medical Journal, the Public Relations Bulletin, the Newsletter, the annual meeting, the fall conclave of committees, the mid winter meeting, interim programs, committee work with representation from all areas of the state, the council system with a councilor and vice councilor from each district, and in direct contact with the membership through the telephone and by letter..

Communication, however, works in both directions and for a member to be reasonably well informed he must make the effort. In the event that the member is not interested in the activities of the Medical Society, he must place his reliance in his county officers, councilor, and delegates to the annual meeting. There is room in committees for membership of any doctor who chooses to participate.

Medical Society Annual Meeting, May 20-24. House of Delegates Sunday and Tuesday afternoon. Reference Committees meet Monday at which all Society members may discuss issues. General Sessions Monday, Tuesday, and Wednesday mornings. Charles A. Hoffman, M. D., AMA President-Elect speaks at 11:30 a.m. on Monday. I hope you will attend.

Wesley W. Hall, M. D., President of AMA, said in Federation Bulletin, "Our strong and historical conviction is that patient care should

be provided only under direction or supervision of a physician. The AMA recommends a holding action of licensing for any additional allied occupation until long term solutions are developed."

Dr. Hall further pointed out, "It is important to note that physician population growth has met or surpassed every projective physician manpower need since such forecasts have been made. (Federation Bulletin, Vol 59, No. 4, April, 1972, page 135.)

One hundred forty cases smallpox in Serbia - Eastern Yugoslavia reported. Twenty deaths with case fatality ratio of 14% since March 24, 1972.

Last year 107 cases of Rocky Mountain Spotted Fever reported in North Carolina - largest number for a year in the past decade. There were seven deaths.

Symposium on Sports Medicine at Blockade Runner, Wrightsville Beach, July 2 - 4, 1972. Last year the Symposium was an outstanding success. The afternoons are free for recreation.

Health Maintenance Organization planning and development grants. now total one hundred ten. There has been sharp criticism of the administration HMO development program without specific legislative authority.

Elliott L. Richardson, Secretary of HEW, supported HEW's position stating that it was appropriate research in health care delivery systems. He stated that the administration expected to have 1,210 HMO's operating by 1980 and furthermore that the entire population of the United States should have the option of enrolling in an HMO. Yet, John R. Kernodle, M. D., Vice Chairman of the AMA Board of Trustees told me that he had had seven different definitions of HMO from HEW in seven weeks.

Amphetamine sales have dropped precipitously in North Carolina, Tennessee, and Indiana where county medical societies have gone on record as opposing the use of amphetamines except in well recognized medical conditions.

F. M. Simmons Patterson, M. D., Executive Director of the North Carolina Regional Medical Program, was installed as President of the North Carolina chapter of the American College of Surgeons at the annual meeting, Blockade Runner. Simmons is also assistant professor of surgery at Duke University Medical Center and was a practicing surgeon in New Bern, N. C., from 1952-1968.

Best wishes and

Sincerely yours,

Charles W. Styron

Charles W. Styron, M. D.
President

Brown Recluse Spider Bite

Report of a Case

Mary Ann Hampton Taylor, M.D.,* and
A. Thomas Olive, Ph.D.†

ALTHOUGH there have reportedly been a few cases of loxoscelism in North Carolina, none has been documented by identification of the spider. One case of renal failure in an elderly man in Winston-Salem was thought to have resulted from *Loxosceles reclusa* toxicity.

In the case reported here, prompt diagnosis and institution of medical therapy proved successful without the use of surgical excision.

ENTOMOLOGICAL CONSIDERATIONS

The first verified infestation of the brown recluse spider, *Loxosceles reclusa*, Gertsch and Mulaik, in North Carolina was discovered early in June 1968, in the Nature-Science Center of Winston-Salem. The first specimen was found in the workshop of the center, and an intense search subsequently disclosed numerous live recluse spiders and exuviae (cast-off skins). Specimens were identified by Dr. Willis J. Gertsch, co-discoverer of the species. The center was immediately closed to the public, sealed, and fumigated with hydrogen cyanide on June 6. No live specimens have been observed in the building.

Sometime afterwards, workers in the center be-

gan finding numerous specimens in a building a few yards behind the Nature-Science Center. This building, a former dairy barn, at the time housed the Child Guidance Clinic, a meeting area for Boy Scouts, and an apartment occupied by two college students. Much of the building was being used for storage by building contractors and other individuals, including an artist. It was evacuated and fumigated with hydrogen cyanide on Nov. 19, 1969. Follow-up examination of the structure disclosed no spiders.

The college student was bitten late on the night of Jan. 9, 1970, and saved the specimen for verification. A few days later the building was evacuated of its human occupants, sealed, and treated monthly with a 2 per cent diazinon dust in a 1 per cent diazinon water emulsion spray and 0.5 per cent dieldrin. The building was opened for occupancy in September, 1970.

It is worth noting that the two buildings involved had been used for various types of storage for many years before their current occupancy. There is no clue as to the source of the infestation, but many possibilities exist. From the large number of recluse spiders and their exuviae found, and considering their biological characteristics, it is obvious that the infestation was at least 10 to 15 years old. It is also significant that because of a few biological characteristics (the spiders can live up to six months without food or water), it is possible for them to

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Reprint requests to Dr. Taylor.



Fig. 1

appear and survive indoors anywhere in the United States (Hite and others¹). Packing materials and old boxes are among their preferred habitats.

The brown recluse spider ranges in color from tan to dark brown, and is medium in size. It has rather long legs and is often confused by the layman with several species of daddy longlegs and other harmless spiders. Its most characteristic feature is the violin-shaped marking on the cephalothorax (Fig. 1), although many harmless spiders have similar markings. Another characteristic of the genus is the presence of six ocelli instead of the more common number of eight. One pair is located frontally and

the other two pairs laterally. The species can be determined only by a specialist, since all *Loxosceles* spiders in this country are similar. Regardless of the species, all members of the genus are thought to be equally toxic. Unlike the black widow spider, both sexes of the brown recluse spider are poisonous.

CLINICAL CONSIDERATIONS

The scant literature regarding brown recluse spider bites presents a dilemma to the attending physician. There is evidence on the one hand that prompt medical therapy is adequate, and evidence on the other that prompt surgical excision is the treatment of

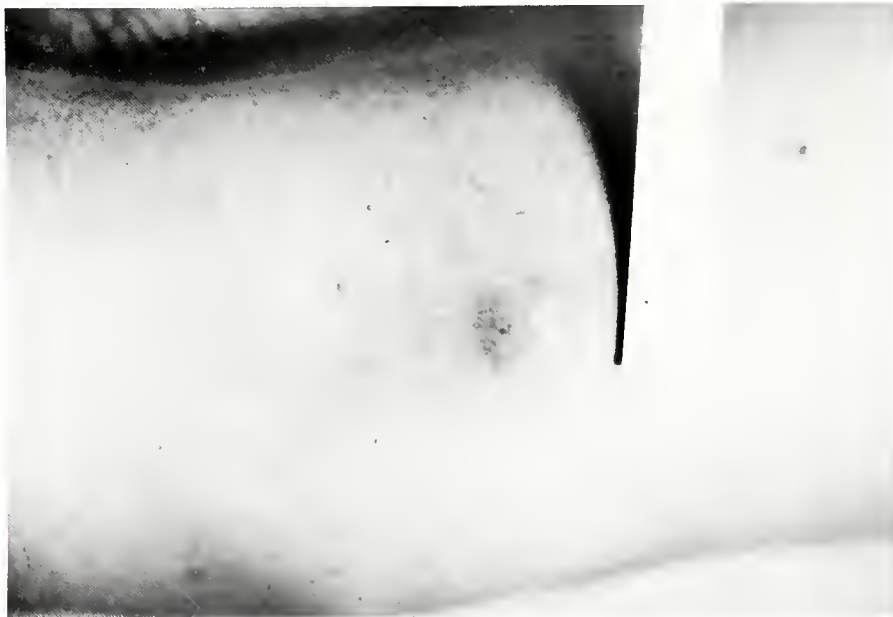


Fig. 2

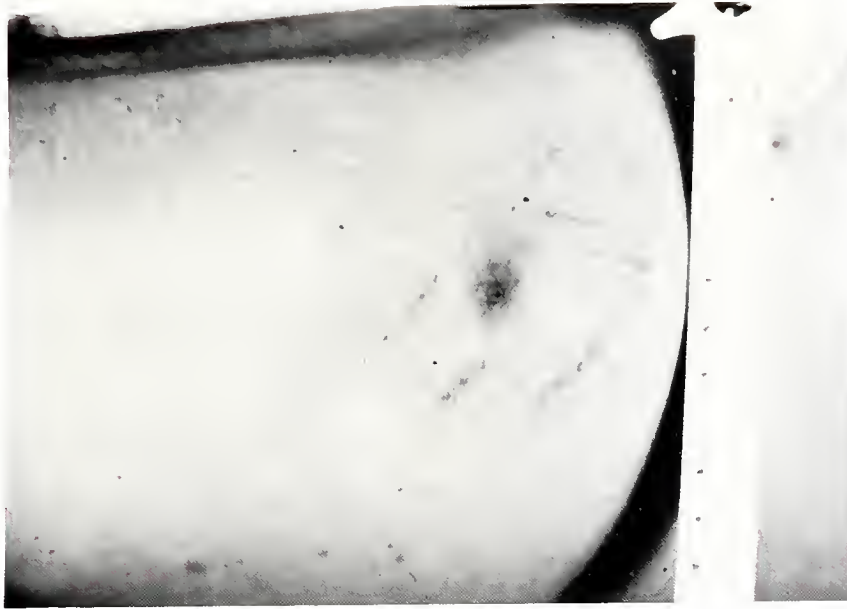


Fig. 3

choice. The following case demonstrates the efficacy of prompt diagnosis and medical treatment.

Case report

A 20-year-old male student at Wake Forest University was bitten by a spider in the right scapular area (posterior axillary line) in the late evening of Jan. 9, 1970. He was living in an apartment near the Winston-Salem Nature-Science Center, and at the time of the bite was lying on a mattress on the floor. The spider was identified as a small male brown recluse spider (*Loxosceles reclusa*). Initially the student was treated at another hospital with a single oral dose of an antihistamine. Approximately 14 hours later he became nauseated, slightly dizzy and feverish, and was admitted to the Wake Forest University Hospital. Oral temperature on admission was 100 F, his face was flushed, and he complained of severe headache. He denied pain at the site of the bite, but said that it was slightly pruritic.

On physical examination he was alert and well oriented and did not appear to be acutely ill. The blood pressure was 120 systolic, 70 diastolic, and the pulse rate was 78. There was an erythematous area measuring 0.5 cm in the right scapular area (Fig. 2). The lesion was minimally tender. There were a few small, tender right axillary nodes.

A course of pyribenzamine, 100 mg every four hours, Tylenol, 600 mg every four hours as needed for fever, fluids by mouth, and Prednisolone, 15 mg every six hours, was initiated. A booster dose of tetanus toxoid was given.

The patient became afebrile within 12 hours. On the third hospital day a petechial eruption around the site of the bite became enlarged to a diameter of 8 cm, and was moderately pruritic (Fig. 3). The area grew to 10 cm. over the following two days

(Figs. 4 and 5). The lesion was completely healed within 14 days. The Prednisolone was continued over a two-day period, and Elase Chloromycetin ointment was applied locally three times daily after the fourth day. The patient continued to attend classes throughout the course of treatment.

Laboratory data, including hemoglobin, hematocrit, white blood cell count and differential, urinary findings, and liver function profile were within normal limits.

COMMENT

Generally, it has been thought that the only successful treatment of brown recluse spider bites was

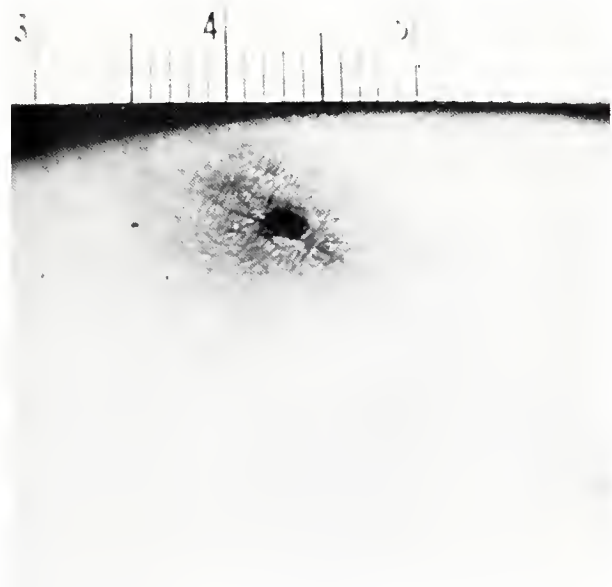


Fig. 4



Fig. 5

full-thickness excision (with primary repair) of the bite area as early as possible, removing all of the visibly affected area.² The earliest evidence of impending necrosis is an area of hemorrhage and discoloration which has become confluent and no longer blanches on pressure or refills after blanching. The pain at this stage is severe, and the edema and erythema advance far beyond the central area of hemorrhage, mottled cyanosis, and pallor. A distinctive feature of necrotic lesions on the thigh, buttock, or abdominal wall is the deep and wide necrosis of fat undermining the skin around the black eschar.³ This plaque of indurated fat is readily palpable, the edge

is tender, and severe pain may persist for weeks or until the lesion is excised.

Early excision of the block of tissue containing the necrotoxin removes the gangrenous and potentially gangrenous tissue, prevents the spread of toxin, and permits early closure before gangrene and secondary infection develop. Excision is not advocated unless necrosis appears inevitable, and in cosmetically or functionally important areas such as on the fingers or face.³

In this case, the spider was identified early; therefore, medical therapy was initiated within the first 24 hours. Patients bitten by a brown recluse spider should be given large doses of corticosteroids immediately to help alleviate systemic reactions, including nausea, vomiting, chills, malaise, arthralgia, hemolysis, hemoglobinuria, renal failure, and hemolytic anemia.⁴ Antibiotics are useful in relieving local symptoms (pruritus and edema). Tetanus toxoid is indicated if the patient has not had a booster dose within five years.

SUMMARY

A case of poisoning from a brown recluse spider bite, the first verified case to be reported in North Carolina, is presented, with consideration of the entomological and clinical aspects. Prompt diagnosis and early institution of medical management resulted in complete healing of the lesion within 14 days.

Reference

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4. Lessenden CM Jr: Spider Bites, in Current Therapy. W. B. Saunders Co., 1968, p 834.

Doctor Gilchrist has given an account of a species of the *lues venerea* which prevails in the west of Scotland, to which the natives give the name of *sibbins* or *sivvins*. He observes, that the spreading of this disease is chiefly owing to a neglect of cleanliness, and seems to think, that by due attention to that virtue it might be extirpated. The treatment of this disease is similar to that of a confirmed lues or pox. The yaws, a disease now very common both in American and the West-India Islands, may be cured in the same manner. —William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 353.

The Physiological Basis of Acupuncture Therapy

Philip M. Toyama, M.D., and Michimasa Nishizawa

ACUPUNCTURE is a traditional method of therapy used in the Orient to treat disorders of the internal organs through stimulation of the body surface by needles. It is described in the *Yellow Emperor's Classic of Internal Medicine*, written in China about 500 B.C.¹

The therapeutic value of acupuncture has been recognized without question in the Orient for more than 3,000 years, but it has not been well known in the Western Hemisphere until recently. During the past 30 years a number of textbooks on the subject have been translated into the major European languages.²⁻⁸ The results of clinical trials have been documented, and further research is in progress in hospitals and medical centers in France, Germany, Great Britain, Italy, Switzerland, Poland, Czechoslovakia, and the U.S.S.R.^{9-30, 34-44}

In France acupuncture is now included in the curriculum of teaching hospitals.¹¹ In Russia, after the completion of basic research, acupuncture will be a part of medical practice. In America recent reports by Veith¹¹ and Dimond^{8,5} have generated widespread interest among physicians.

INDICATIONS AND CONTRAINDICATIONS

During the past 3,000 years countless cases of various diseases have been treated by acupuncture

in China, Japan, Korea, and many other Asian countries. Some of these cases are on record and available for review. More recently, documented cases and data from laboratory investigation have been reported in many European medical journals.¹³⁻⁷⁴

In summary, good results have been achieved with acupuncture in the treatment of various diseases, often considered to be neurovegetative and endocrine disorders, such as essential hypertension, Cushing's syndrome (bilateral adrenal hyperplasia), dysfunctional uterine bleeding, diabetes mellitus, rheumatism, idiopathic neuralgia (trigeminal neuralgia, intercostal neuralgia, and lumbosacral root syndrome), vasomotor rhinitis, glaucoma, peptic ulcer, spastic colon, asthma, and various dermatoses.¹⁶⁻⁴⁰ Acupuncture has also been used for anesthesia with good results.^{34-37, 85}

Acute infectious diseases, such as tonsillitis, otitis media, malaria, upper respiratory tract infection, gastroenteritis, appendicitis, food poisoning, peritonitis, nephritis, and hepatitis have also been treated with good results.⁴¹⁻⁵⁰

Chronic organic diseases are more resistant to treatment with acupuncture. They usually require longer periods of time, ranging from several months to several years depending upon the degree of chronicity and preexisting structural damage, and often cure is incomplete.^{42, 51} Malignant neoplasms are also resistant to therapy, although relief of pain or enhancement of general well-being is often obtainable.³¹⁻³³ Acute surgical conditions, such

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as perforated viscus are, needless to say, contraindications to the use of acupuncture.

MECHANISM OF ACTION

The acupuncture points correspond well with Head's areas of referred pain. According to Head's postulate, the cutaneous pain felt in visceral disease is located in the areas where sensory nerves enter the spinal cord at the same segments which supply nerves to the viscera concerned. It appears that the impulses stimulated by various needle points on the skin are transmitted to the internal viscera through the somatovisceral neuronal synapses in the spinal cord.^{52, 53} During the process of transmission through such synapses, one of the components of the visceral nerves—either the sympathetic or the parasympathetic—seems to be selectively stimulated and adjusts the function of the autonomic nervous system.

Evidence to support this view is submitted by Grashchenko and associates.⁵⁴ They demonstrated that the blood content of epinephrine, norepinephrine, diamine oxidase, acetylcholine, acetylcholine esterase, and histamine in their patients with asthma and peptic ulcer returned to normal after acupuncture. It is, however, quite possible that the effect of acupuncture on the adjustment of the function of the autonomic nervous system may be mediated at the level of the thalamus rather than in the spinal cord.

Rasmussen and Penfield have demonstrated that each area of the surface of the skin has a representative area in the cerebral cortex. Impulses generated by dermal stimulation of various kinds on the body and extremities are known to be transmitted through specific pathways into specific areas of the cerebral cortex and influence its function. This observation has been further corroborated by Kassil and associates^{56, 57} at the Reflex Therapy Laboratory of Moscow. They noted specific changes in the pattern of electroencephalograms after acupuncture.

These findings are extremely interesting when reviewed in conjunction with the reports by Mandell and others,^{58, 59} who demonstrated that stimulation of one of the limbic structures, the amygdala, produced 17-hydroxycorticoid release, while stimulation of another limbic structure, the hippocampus, reversed the effects of previous stimulation of the amygdala. We now know that the cerebral cortex can influence the production of ACTH through the reticular activating system.^{60, 62} We also know that the anterior pituitary stimulating action of the hypothalamus can further be influenced by impulses generated in the limbic system.^{58, 59} For that reason, specific stimulation of the skin by acupuncture could influence the functions of the cerebral cortex and subsequently the hypothalamus and its subordinated endocrine glands in some specific manner. In this regard, Boeva and colleagues⁴⁰ demonstrated

that "stimulation acupuncture" produced an increase in the endogenous production of ACTH, and subsequently in adrenocortical hormones. Their investigation revealed that stimulation acupuncture produced an effect similar to that seen following the injection of 25 international units of ACTH.

(Stimulation acupuncture is administered in such a manner that the summation of all needle stimuli applied to the body surface will cause an effect similar to the activation of the sympathetic nervous system and/or the amygdala nucleus. Sedative acupuncture, on the other hand, is administered in such a manner as to produce activation of the parasympathetic nervous system and/or the hippocampus nucleus.)

In Oriental medicine excessive emotional stress is considered one of the important causes of functional disturbances of internal organs. For example, a symptom complex known in Western medicine as essential hypertension is considered in Oriental medicine to be caused, at least in part, by some functional disturbance of internal organs due to emotional stress. Evidence to support this view has been submitted by many Western investigators. Barajas,⁶³ using the electron microscope, demonstrated nerve endings, which appeared to be sympathetic, in association with juxtaglomerular cells as well as arteriolar smooth muscle cells of the kidney. Tobian and associates⁶⁴ noted a marked increase of renin in the renal veins when epinephrine and norepinephrine were infused into the renal arteries of dogs. Rapid degradation of juxtaglomerular cells was also demonstrated under similar conditions of epinephrine infusion in rats by Kamura and Niwa.⁶⁵ These findings support the view that the production of renin, and subsequently of angiotensin, is, at least in part, under the control of the nervous system. As demonstrated by Kassil and associates,^{56, 57} sedative acupuncture can lower the blood pressure by reducing the content of epinephrine and epinephrine-like substances. On the other hand, stimulation acupuncture can elevate the blood content of epinephrine and epinephrine-like substances, as shown by Boeva and colleagues.⁴⁰

Chronic pyelonephritis, often present in patients with hypertension, is worth comment. In Oriental medicine, chronic pyelonephritis is considered to be the manifestation of a physiological disturbance of homeostasis in the kidney, with the view that bacterial infection is only secondary. The current concepts of chronic pyelonephritis in Western medicine also support this view. Recently evidence has been offered that a high local concentration of ammonia, such as may be present when the body is dealing with an excessive acid load in cases of various types of metabolic acidosis, is sufficient to inactivate complement, thus rendering ineffective a major defense mechanism against infection.⁶⁶ According to recent reviews on hypertension and pyelonephritis by Katz

and Courdo,⁶⁸ significant numbers of patients with hypertension show varying degrees of pyelonephritis. Furthermore, as indicated by Miall and associates,⁶⁹ treatment of pyelonephritis by bacteriocidal agents does not affect the overall pattern of blood pressure. It is therefore considered that chronic pyelonephritis in patients with hypertension is probably the manifestation of disturbed physiological homeostasis. This line of thinking is further substantiated by data submitted by Selye,⁷⁰ who induced nephritis by injecting rats with large doses of adrenal DOCA.

According to Selye's concept of the general adaptation syndrome,⁷⁰ a "stressor" acting on the organism or any particular target tissue initiates an

"alarm reaction" through excitation of the sympathetic nervous system and the adrenal medulla. Following the alarm reaction the initial phase of the body defense mechanism begins as the "stage of resistance." This stage is caused by a rise in adrenocorticotropin, leading to adrenal secretion of glucocorticoids and, for a brief time, mineralocorticoids as well. The mineralocorticoids tend to localize the stressor agent by enhancing inflammatory reaction and eventually building up fibroblastic barriers. When the stress is prolonged, the action of the mineralocorticoids tends to establish pathological changes characteristic of the "diseases of adaptation," in which Selye has included all the mesen-

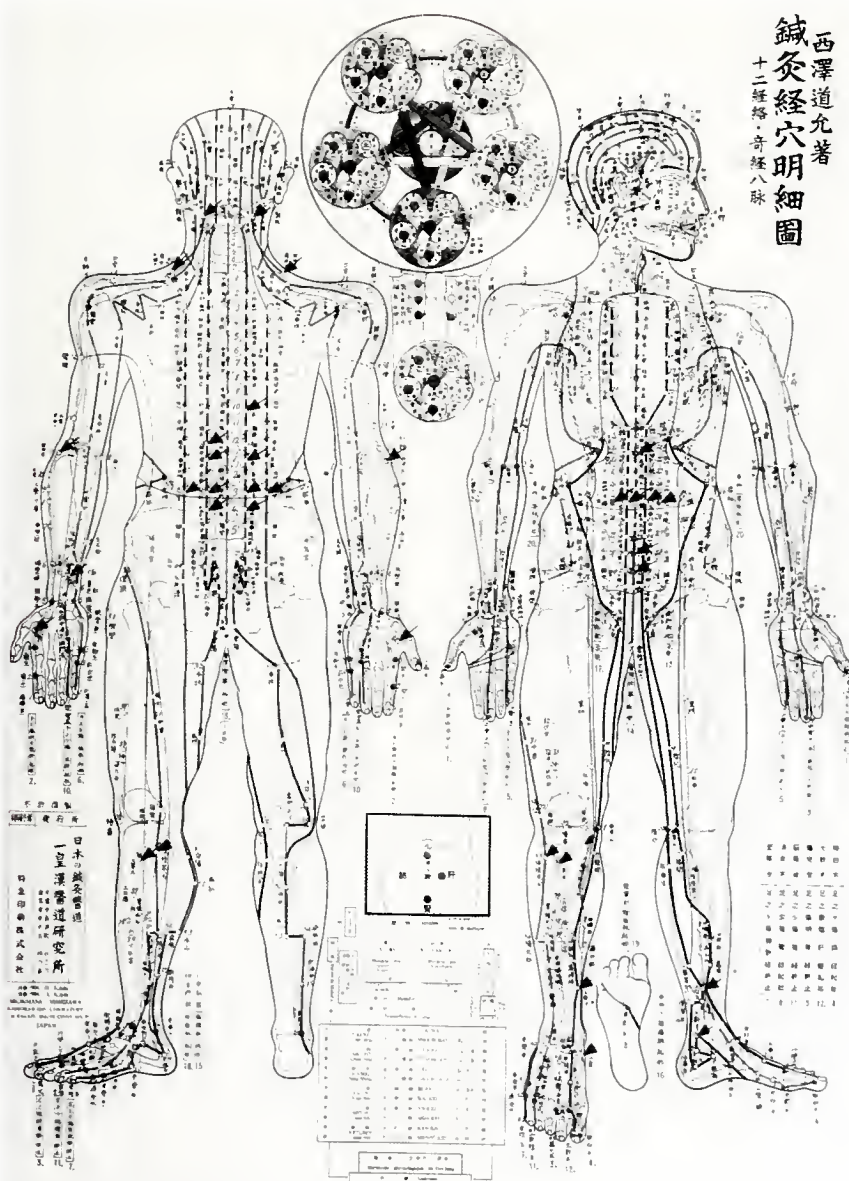


Diagram from the original drawings in The Yellow Emperor's Classic of Internal Medicine with some modification, illustrates the points of dermal projection of the internal organs and viscera.

chymal and degenerative vascular diseases.

Whether or not an acute alarm reaction will eventually be followed by a disease of adaptation depends, among other things, on the magnitude of the glucocorticoid secretion. Glucocorticoids, represented chiefly by cortisol, replenish depleted carbohydrate stores and protect cells against many of injurious effects of the reaction to the stressors. Therefore, the injection of cortisol minimizes inflammatory responses and subsequent tissue degeneration. The injection of artificial hormones is, however, unnatural, and it has been clinically demonstrated that in most cases such drugs, while temporarily counteracting stressor effects, do not produce physiological harmony. Acupuncture, on the other hand, allows the reestablishment of physiological equilibrium without drugs.^{40, 56, 57} The beneficial effect of acupuncture in the treatment of chronic degenerative diseases can be explained on the basis of its effect on the adjustment of function of the autonomic nervous system and the endocrine system as well. In fact, it seems to act to restore the body's natural defenses against stressors.

ANESTHESIA

In China acupuncture is used extensively for anesthesia in major surgical operations. Dimond recently reported his observations on patients undergoing thyroidectomy, thoracotomy, and laparotomy. His and other reports from Europe indicate that the success rate of this type of anesthesia is quite high—in the neighborhood of 90 to 95 percent.^{34-37, 74, 85} However, the physiological basis of acupuncture anesthesia is not clearly understood at present. Dimond recently provided several references from his library research.⁷⁵⁻⁸⁵ The electronic theory of inhibition of the cortical sensory neurons is indeed attractive. It is to be noted, however, that acupuncture is capable of producing anesthesia even without the application of electronic current. For that reason, the hormonal theory of inhibition is equally attractive. It is well known that synpathin released at the sympathetic nerve endings inhibits some of the effector structures innervated by sympathetic fibers, and that acetylcholine liberated by some of the parasympathetic endings can cause similar inhibition. Grashchenkov has demonstrated that the blood content of synpathin and acetylcholine can be regulated by adjusting the amount of acupuncture stimuli as well as the sites of application.⁵⁴ Therefore, it is not unreasonable to postulate that the excitability of sensory neurons of the central nervous system could also be regulated by adjusting the amount of hormone capable of inhibiting ganglion cell excitability. Although the presence of such a hormone needs to be proved, careful review of the ancient Chinese literature strongly suggests this possibility.^{1, 67}

SUMMARY

Acupuncture is an ancient Chinese method of treating disorders of internal organs through stimulation of the body surface by needles.

Acupuncture appears to be most effective in the treatment of functional disorders of internal organs. Its beneficial effect appears to be due to its influence on the adjustment of the autonomic nervous system and the endocrine system as well.

Widespread use of acupuncture anesthesia in major surgery in China is a relatively recent development. The physiological basis for its anesthetic action is not clearly understood at present. However, electronic inhibition, hormonal inhibition, or both have been proposed as theories.

Significant contributions made by Western investigators to the understanding of the physiological basis of acupuncture are reviewed.

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Though we are still very much in the dark with regard to the method of curing [syphilis] among the natives of America, yet it is generally affirmed, that they do cure it with speed, safety, and success, and that without the least knowledge of mercury. Hence it becomes an object of considerable importance to discover their method of cure.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 350.*

Patterns of Patient Utilization in a Volunteer Medical Clinic

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DURING the past six years many new institutions and programs have sprung up all over the nation to meet a need which had not been widely recognized prior to 1965. The severe health and health service needs of the poor and the deficiencies of existing facilities for meeting those needs have been exposed to public view only recently.¹ Since 1965 a wide variety of organized approaches for bringing health care to disadvantaged communities have been demonstrated and described.² Many of these programs have been supported by federal grant programs. Others are entirely voluntary efforts.

One of the most significant of the voluntary approaches to the problem is the community clinic operated by health science students. These clinics are located in low-income neighborhoods. In larger cities they are sometimes operated in public housing projects.³ Beyond primary medical care, their scope of service is limited, and they are typically open only part time, usually in the evening. Staffing—both clinical and administrative—is by medical, dental, nursing, and other health science students, with supervision and definitive medical and dental care provided by licensed physicians, dentists, and nurses, who volunteer their services without pay.

A 1970 survey of community activity by medical students in the United States placed the number of free clinics in operation at 28.⁴ Two of these are in North Carolina—one in the Chapel Hill—Carrboro community, the other in the Edgemont neighborhood of Durham. The latter is the subject of the study reported in this paper.

THE EDMONT COMMUNITY CLINIC

Beginnings

The Edgemont Community Clinic of Durham, North Carolina has completed its third year of operation as a student-initiated and community-controlled primary health care program. It is staffed by health science students from the University of North Carolina at Chapel Hill and Duke University in Durham. The role of students in the operation of the clinic has been described in detail elsewhere.⁵⁻⁷ The clinic was initiated by a group of University of North Carolina health science students interested in community health. A student organization, the Student Health Action Committee (SHAC), was formed as a vehicle for involving students in community health projects. The students identified Edgemont, a racially mixed neighborhood in Durham consisting almost entirely of low income groups, as a "community of need" with limited access to health care.

The health service resources used most often by Edgemont residents are the outpatient clinics and emergency room of Duke Medical Center and the more limited categorical clinics of the Durham County Health Department. Lack of transportation to Duke (located on the opposite side of town from Edgemont), financial considerations, prolonged waiting, and the impersonal service associated with a large teaching program have caused many patients to defer seeking medical attention until they are severely ill and have reinforced the habit of obtaining symptomatic relief only and of failing to keep follow-up appointments.

After consulting with residents of the Edgemont community, the SHAC members began giving educational programs in public health during the spring of 1968. As the students became involved with the

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residents in these and other service activities, the need for a permanent neighborhood based source of medical care was apparent. Through the efforts of the United Organizations for Community Improvement, a local anti-poverty group operating in the black community, a community board was formed for the purpose of organizing a clinic. A vacant store was located, and with the help of SHAC students from the University of North Carolina, now joined by medical and nursing students from Duke, the Edgemont Community Clinic opened its doors on Nov. 4, 1968.

The objective of the founders was to provide a program of personalized, continuous, free primary health care to the residents of Edgemont. Community involvement was considered essential, and all policy decisions were to be made with the complete approval and support of the community board.

Facilities, services, and operation

The Edgemont Community Clinic is open each Monday and Thursday evening, beginning at 6:00 P.M. Patients who arrive before 9:00 P.M. receive care that night. Between 25 and 35 patients are seen by the staff during each session.

The clinic contains six examining and treatment rooms, a dental office with two chairs, a small laboratory, a pharmacy room, a waiting room, and a playroom for children. The laboratory is equipped for urinalysis and basic hematologic studies. Specimens for microbiological and clinical biochemical studies are collected at the clinic and the results are reported from laboratories at Duke Hospital and North Carolina Memorial Hospital in Chapel Hill. At the first visit patients with medical complaints receive a complete physical examination, hemogram, and urinalysis. An electrocardiograph, recently donated, is also available. The pharmacy dispenses a fairly wide selection of drugs donated by several pharmaceutical firms. The dental service, operating only on Mondays, consists of screening procedures, education in hygiene, and limited restorative work. Referrals for further operative dentistry are made to the UNC School of Dentistry.

Referrals are made to other facilities—principally the Veterans Hospital at Durham and Duke University Medical Center—when patients require further diagnostic work or care that the clinic is unable to provide. In addition to general medical care, a special obstetrics-gynecology clinic is held once a month.

Student staffing is supplied by the Duke University schools of medicine and nursing; the schools of medicine, dentistry, pharmacy, nursing, public health, and social work of the University of North Carolina; and the Watts Hospital School of Nursing in Durham. On an average night the student staff consists of six medical students, six nursing students

and assistants, four dental students, three medical technology students, two pharmacy students, a student social worker, a student dietitian, and a student acting as clinic coordinator. Medical and dental supervision is provided by volunteers from the faculties of Duke and UNC. At least one internist, pediatrician, dentist, and registered nurse are in attendance at each session. Also present on clinic nights are at least one member of the community board and a secretary-receptionist employed by the board.

Limited financial support has come through contributions from several sources, including the Women's Auxiliary of the Duke medical faculty, the student governments of the Duke and UNC schools of medicine, the SAMA-Sears Foundation, and recently, a small grant from the North Carolina Regional Medical Program. Included in this grant is support for three part-time neighborhood health aides—members of the community who have been trained in providing home health and related social services.

BACKGROUND AND METHODS OF THE STUDY

By the spring of 1970 rapid growth of the Edgemont Clinic program was forcing the student administrators to raise questions about the utilization of the clinic and its operation.

Specific data were needed as a guide for further planning and general assessment of the quality of the clinic's program of service. Moreover, questions were raised about the most appropriate community role the Edgemont Clinic might fill and, more generally, about where clinics of this type fit into a community system of health services. To begin answering these kinds of questions, some basic data were needed which would describe the clinic's population and the ways in which services have been utilized during the first 20 months of operation.

It was recognized that any study which purported to document the past experience of the Edgemont Community Clinic would be limited by the quality of information contained in patient records, the only available source of data. However, it was decided that retrospective documentation within the limits of available data would be of significant value to the clinic's present leaders, and a profile of the clientele and reasons for using the clinic should, in any case, precede initiation of more carefully planned prospective studies.

Accordingly, a survey of the first 20 months of the clinic's operation was completed during July and August of 1970. The method used was simple and straightforward. Selected demographic and service data were collected from 860 clinic charts, transcribed to pretested coding forms, and handpunched on McBee keysort cards. Tabulation and crosstabulation of data were carried out manually.

GROWTH

Total number of patients

Between Nov. 4, 1968, and July 30, 1970, a total of 860 patients had been treated in the Edgemont Community Clinic. The number grew steadily during the early months until the summer of 1969, when the original storefront facility was destroyed by fire. By late summer new and larger quarters had been found a few blocks away. It was also at this time that white community representatives were first included in the clinic's board of directors.

With the return of students from summer vacation and the equipping of the new facility, the number of new patients again increased steadily during the fall of 1969. In March of 1970 the clinic experienced a new surge of growth when it expanded its service hours from one to two evenings per week. By July, 1970—the end of the period covered by this study—growth in terms of the total number of known patients had not become stabilized (see Fig. 1).

Race and residence of new patients

At the end of the first month of operation, 96 percent of the clinic's patients were black. Two months later, however, whites composed 44 percent of known patients. Since that time growth in patient load has been nearly equally divided between black and white.

In terms of patients coming from outside the immediate Edgemont neighborhood, three trends are

evident. First, since the first month of operation when all patients were Edgemont residents, the percentage of new patients coming from this area has declined each month, although growth in absolute numbers held fairly constant. Second, the proportion of new patients from East Durham (an adjacent neighborhood with similar socioeconomic characteristics) increased steadily during the first eight months, but has since held steady. Finally, the proportion of patients coming from other areas of Durham has increased dramatically. By July, 1970, patients coming from areas of Durham County other than Edgemont and East Durham made up 46 percent of all patients known to the clinic.

Total visits

The other parameter used in this study for measuring growth of the clinic was the total number of visits. Because the clinic operation included no specific mechanism for collecting data on utilization, all data had to be painstakingly culled from the individual medical records. It was, therefore, not feasible to analyze volume of use either by specific data or patient characteristics. Instead, the history of the clinic's operation was divided into three general periods for the purpose of tabulating total patient visits: (1) from the opening in November, 1968, to the temporary suspension of full service due to the fire at the end of June, 1969—eight months; (2) the second eight month period ending with the expansion of operations to two nights per week at the end of February, 1970; (3) a period of four months ending June 30, 1970, the cut-off date of this study.

During the first eight months of operation 485 visits to the clinic were made, during the second eight months 813 visits were made, and during the last four months, 897 visits were made. These figures document real growth both in total utilization of clinic services and in numbers of new patients, previously noted.

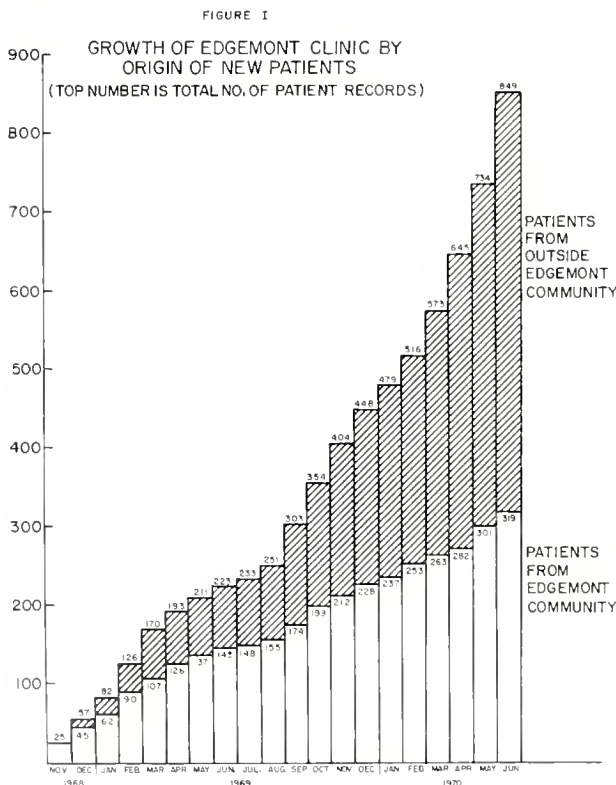
WHO ARE THE PATIENTS?

Using data collected from each patient on his first visit, the clinic's patient population can be described in terms of several key dimensions: age, sex, race, economic and employment status, family stability, and neighborhood of residence.

Age

The clinic apparently serves a predominantly young adult population, with relatively little use by the elderly. Approximately 70 percent of the patients who have been seen at the clinic range from 16 to 50 years of age. Except for use of maternity care (underrepresented as a clinic service), this is an age group that uses less medical care than do younger adolescents and children or adults past 50 years of age.

One interpretation suggested by these data is that



parents tend to use other sources of medical care for their children while coming to the clinic themselves. The elderly, who are more likely to have chronic ailments requiring more continuous medical management than the Edgemont Clinic can provide, may also be more likely to have found other sources of care.

For most of the people who use it, the Edgemont Clinic probably serves as a convenient source of medical care at times when a continuing, personal relationship with a single responsible physician seems to them of secondary importance. If they had access to a better equipped facility capable of rendering more continuous care, many of them might resort to Edgemont only in instances when convenience seemed clearly more important than continuity of care.

For example, the large number of young males among the clinic's known patients can be explained by the extensive use they make of the facility for routine physical examinations required for employment and participation in sports, a necessary service but not one in which continuity of care is especially important. Since data are not available on all the families represented by the patients, and since the clinic serves no target population as such, this interpretation cannot be validated without extensive investigation through patient interviews.

Sex

During the period studied, 56 percent of the patients were female and 44 percent were male. The preponderance of females over males was particularly marked in the 35 to 50 year age group, where female patients were three times as numerous as males.

Significantly more black males have attended the clinic than have white males (222 to 149). This difference is attributable to the more extensive use of the clinic by young black males as a source of routine physical examinations. If this category is discounted, there is no marked difference between the numbers of black and white male patients.

Race

Representation is evenly divided between black and white patients from the Edgemont neighborhood, where blacks and whites make up nearly equal proportions of the population. White patients from East Durham outnumber black patients from that area by 3 to 2. Blacks constitute all patients from the Burton School district, and black patients outnumber white patients from the remaining districts by 3 to 2.

In all, of 860 clinic patients, 57 percent are black and 43 percent white. These figures are generally consistent with census data on racial distribution in each of these areas.

There is apparently no racial label placed on the Edgemont Community Clinic by its patients. The biracial community board and the high degree of community organization among the poor of both races have probably contributed to the biracial mixture of the clinic's clientele.

Economic and employment status

Because it is located in the middle of a low-income neighborhood in Durham, collects no fees, and is directed by a board representative of the leadership, both black and white, of low-income working class people, the Edgemont Clinic exists to serve a predominantly poor clientele. There is no means test, nor are patients routinely questioned about income. Therefore, although it is apparent from observation that the patients are poor, there are no available data on their specific income level.

Unemployment is high among adult male patients of the clinic. Of the 126 males in the 18 to 65 year age range, 66 percent were actively employed or in school and 34 percent were unemployed at the time of the first visit. The unemployed constituted 29 percent in the 18 to 40 year age range, 33 percent in the 41 to 50 year group, and 43 percent in the 51 to 65 age range.

One possible explanation for the large proportion of unemployed males is that our data do not distinguish between those who are actively seeking employment (the U. S. Labor Department definition of an unemployed person) and those who are not. It is unlikely, however, that making this distinction would have altered these figures significantly. Official statistics show an extremely high rate of unemployment in the areas served by the clinic. In addition, it is likely that males who have visited the clinic are among the least healthy in these areas and therefore less likely to be employable in available jobs.

Family stability

One indicator of family stability is the sex of the head of the household. Parents seen at the clinic were asked to indicate whether the father or the mother held the position of family leader.

Of 466 children under 18 years of age, the mother was head of the household in more than 40 percent of the cases. The mother held this position for 31 percent of the 181 white children, and for 47 percent of the 285 black children. These data do not reflect the number of families involved or their relative size.

These numbers are an indication of the socioeconomic instability of the areas that the clinic serves. Much has been written about the black matriarchal society, but these findings suggest that in Durham matriarchal dominance exists to a substantial extent among families of low socioeconomic status in both races.

Neighborhood of residence

A slight majority of clinic patients live in the three census tracts nearest the clinic. Thirty-seven percent live in Edgemont and 17 percent in East Durham, adjacent to Edgemont. Seven percent came from the Burton School district, a predominantly black area of a slightly higher average level of income, farther from but easily accessible to the clinic; 5 percent came from Southside tract, predominantly white and located approximately three miles from the clinic; 24 percent from other areas in Durham, and 10 percent from areas of Durham County outside the city limits.

This residential distribution of patients can be explained by such factors as proximity to the clinic, access to transportation, physical barriers, layout of streets, and knowledge of the clinic. It is significant that relatively few patients come from the Hayti neighborhood, an area of great poverty in Durham. Although Hayti and Edgemont are not far apart, they are effectively separated by railroad yards and an expressway, and there is no direct public transportation between them.

UTILIZATION OF THE PROGRAM

The relatively low proportion of dental visits is explained by the fact that dental services were not offered prior to March of 1969, that they have been offered only one night per week, and that they included only examinations and hygiene procedures. (Since August, 1970, a limited amount of restorative dentistry has been provided to selected patients.) Because patients requiring operative procedures were referred to the UNC School of Dentistry, few dental patients were seen at the clinic more than twice. Slightly more than half of all dental patients made only one visit to the clinic for dental care, 25 percent made two visits, and the remaining 25 percent more than two.

Medical service

A majority of patients used the clinic only once for medical care as well as for dental care; however, many more medical patients than dental patients made multiple visits to the clinic (Table 1). Referrals of patients to other facilities for medical care were made much less frequently than for dental care.

Of all 860 clinic patients, 16 percent received both medical and dental services, 71 percent came for medical care alone, and 13 percent for dental care alone.

Reasons for medical visits

To determine the kinds of medical problems seen at the clinic, the chief clinical reason for each patient's last medical visit was obtained from the medical record, and the totals for each category of reasons were tabulated. The most frequent single rea-

son given was examination without specific complaint. Physical examinations required for work, camp, or athletic participation accounted for 18 percent of last visits, with examination in the course of routine well baby or child health supervision accounting for an additional 6 percent. The remaining 77 percent were for initial or continuing treatment of some medical illness or clinical problem.

The three most common reasons recorded were upper respiratory infections, 16 percent; emotional problems, 11 percent; and diseases of the skin, 6 percent. The ten most frequent reasons for last medical visits are shown in Table 2.

Reasons for the last medical visit were further analyzed according to the number of times the patient had visited the clinic previously (Table 3). Physical examination was the most frequent reason (27 percent) for patients whose last visit was also the first, but only 1 percent among patients making more than two visits. Patients who came to the clinic more than twice were likely to have been seen on a continuing basis for some chronic medical or emotional problem.

This suggests that new patients view the clinic almost exclusively as a source of free checkups and care for very common, usually minor, medical illnesses. Only as other problems are uncovered and patients gain confidence in the clinic through ex-

Table 1
Percentage of Patients by Number of Medical and Dental Visits

Number of Patient Visits	Percent of Patients
Medical	
1	59
2	17
3-5	14
6-10	5
11-33	5
	100%
Dental	
1	73
2	18
3-5	8
6-10	1
	100%

Table 2
Ten Most Frequent Reasons for Last Medical Visit

Reason	Percent of Total Visits
Physical examinations	17.6
Upper respiratory problems	16.3
Psychiatric and emotional problems	10.5
Dermatological problems	6.4
Trauma	6.0
Hypertension	5.9
Child health supervision	9.7
Gynecological problems	3.7
Otitis	3.2
Middle and lower respiratory problems	3.0
Other	21.6
	100.0

Table 3

Percentage of Last Medical Visits by Reason for Visit
According to Volume of Clinic Use by Patients

Reason for Last Visit	Number of Visits				
	1	2	3-5	6-10	>10
Physical examination	35.6	8.6	0.0	0.0	0.0
Emotional disorder	6.0	12.9	17.1	19.4	34.4
Upper respiratory tract disease	13.7	25.9	18.1	22.3	3.2
Dermatological	7.8	6.0	4.0	2.8	3.2
Hypertension	3.0	7.8	13.2	13.9	6.3
Gastrointestinal disorder	1.5	6.0	2.0	0.0	3.2
Trauma	5.4	3.3	9.1	16.7	3.2
Gynecological problem	2.7	5.1	3.0	8.3	3.2
Middle-lower respiratory tract	2.0	2.5	5.1	0.0	9.4
Congestive heart failure	0.0	1.7	0.0	2.8	15.6
Diabetes mellitus	1.5	1.7	0.0	0.0	12.5
Other*	20.8	18.5	28.4	13.8	5.8
Total	100.0	100.0	100.0	100.0	100.0

* "Other" includes all reasons which did not account for more than 5% of visits in any of the five volume of use categories.

perience do they begin to bring their more serious problems.

COMMENT

The program of the Edgemont Community Clinic has experienced steady growth from its inception on Nov. 4, 1968. From its beginning as a facility utilized primarily by black residents from the immediate community, it has evolved as a facility utilized by blacks and whites from many areas of Durham County.

Clinic growth has been influenced by a number of factors. As knowledge of its program spread, new patients were attracted from the areas adjacent to Edgemont. Referrals by former patients are probably the most significant factor, but other agencies in Durham, particularly the Health Department and the public schools, now refer patients to the clinic for care or routine and specific diagnostic examinations. The stability of the clinic has been demonstrated to the community by its continuous operation and expansion of service despite fire and lack of funds. Strengthening the community board of directors in numbers and awareness has also been extremely important to continued growth.

The Edgemont Clinic experience strongly suggests that there is a large unfulfilled demand for primary medical and dental care—particularly entry point care—among poor and working class people of Durham County. At the same time this study raises the question of how this care can best be provided. Obviously, a volunteer clinic staffed only two nights per week can never provide a comprehensive health care program, or even a wholly adequate primary medical care service. Continuity of the patient-physician relationship must suffer to some extent, and the lack of necessary equipment and facilities prevents the clinic from providing a complete scope of primary medical care. Financial resources, if they could be made available, would, of course, do much

to correct these deficiencies. Still, any part-time primary care facility must be linked to some larger back-up source of care if it is to serve as the central agency to which they can confidently bring their health problems. At present there is no source of primary care in the Durham community which could include the Edgemont Clinic within its service community. The Lincoln Community Health Center, scheduled to open in the fall of 1971, will provide comprehensive primary medical and dental care initially to approximately 4,000 patients, and so may ease the pressure on Edgemont somewhat.

The findings of the study suggest several areas in which further investigation is needed. It is important to know where, in addition to the Edgemont Community Clinic, these patients obtain primary health care. For how many persons does the clinic serve as the central source of care?⁸ Are there certain kinds of problems for which many patients hesitate to use the clinic — even as a source of first contact? How do clinic patients view the presence of students in important clinical roles? Is the community board a significant factor in regard to the level of confidence which the clinic seems to enjoy from its patients? These and other questions concerning the overall impact of the Edgemont program are of interest to the clinic's leadership, and further studies are planned which may provide some answers. Such questions might also shed some light on the significance of the current "free clinic" movement in some of the nation's larger cities.⁹

Volunteer clinics such as Edgemont provide important stop-gap solutions to many of the problems that the poor have in obtaining needed medical care. Although such programs must have some source of outside financing before they can stand as permanent solutions to these problems, they do provide an immediate source of medical care, and they can play an important role in educating health science students with regard to the problems of providing community solutions to community health needs.

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North Carolina Cancer Registry

Thomas J. Vitaglione,* Joseph A. Buckwalter, M.D.,† and James F. Newsome, M.D.‡

THE newest component of the State Board of Health's cancer program is the North Carolina Cancer Registry, subsequently referred to as the "central registry." The goal of the registry is to improve cancer care in North Carolina by helping hospitals to establish and operate cancer registries and by encouraging the formation of hospital cancer programs. A hospital cancer program, which consists of a cancer registry and a cancer clinical program (a cancer conference, clinic or board), is a continuation cancer education program for physicians and allied medical personnel who provide medical care for the cancer patients.

When the North Carolina Cancer Registry is informed that a hospital wishes to develop a cancer registry, information is provided concerning the procedures which are necessary to organize, develop, and operate such a program. A field representative from the central registry meets with the medical, administrative, and record room staff who are involved with the cancer registry's development. The field representative helps train the secretary who will be responsible for the hospital registry's operation. A handbook which describes the mechanics and the procedures involved is supplied. Abstracts are provided which are used by the secretary for recording the information obtained from the cancer patient's medical record. Further assistance is provided by storing, retrieving, and analyzing the hospital cancer patient data. The North Carolina Cancer Registry assists the hospital in the vital function of conducting follow-up on all cancer patients until their demise.

The overall impact of the hospital cancer registry is to make it possible for the professional staff of the hospital to learn more about the biological and clinical behavior of the different kinds of cancer. It is also one of the most reliable means by which the effectiveness of different methods of treatment can be evaluated.

Statistical information which includes demographic characteristics of cancer patients, site, stage, and basis of the cancer diagnosis, treatment modalities, and survival information is "fed back" to physicians and hospitals by the central registry. As already indicated, registry data can provide a basis for assessing the quality of cancer care being achieved in the hospital. The data are vital input for the hospital cancer educational programs and are useful to those interested in conducting epidemiological and other types of cancer research.

BACKGROUND

In 1968, in response to repeated requests by physicians throughout the state, the Governor's Commission for the Study of Cancer asked the North Carolina Regional Medical Program to develop a central cancer registry. Both organizations felt that the State Board of Health would be the logical agency to administer the program, since statutes already required that all cases of cancer be reported to the latter. The Regional Medical Program provided the initial funding for the project. The State Board of Health's Chronic Disease Section assumed administrative responsibility for the registry in fiscal year 1970-1971 and in July of 1971 assumed responsibility for its fiscal support. The Regional Medical Program continues to support a central registry advisory committee which is composed of clinicians, statisticians, and epidemiologists inter-

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Reprint requests to North Carolina State Board of Health, Box 2091, Raleigh, N. C. 27602.

ested in cancer. The project has also received enthusiastic support from oncologists and other members of the faculties of the University of North Carolina, Duke, and Bowman Gray Schools of Medicine and the North Carolina Medical Society.

The procedures, policies, and operation of the program are determined by the advisory committee. The program is being implemented by a part-time director and a staff consisting of an administrator, two field representatives, and several data processors. The growth of the central registry since 1968 is a tribute to the efforts of many individuals who represent the organizations indicated above. Ten hospitals originally participated in the program; now there are 22 (Fig. 1). More than 10,000 cancer patient abstracts have been sent to the central registry by these hospitals. The data, which has been "fed back" to the hospitals in the form of two annual reports, is already being used by clinicians, administrators, and researchers.

In an effort to obviate duplicate reporting under the state's reportable disease law, the Cancer Committee of the Medical Society (which has legal authority in these matters) has ruled that as of January, 1972, pathologists in participating hospitals

are exempt from reporting cancer cases that are reported under the registry system.

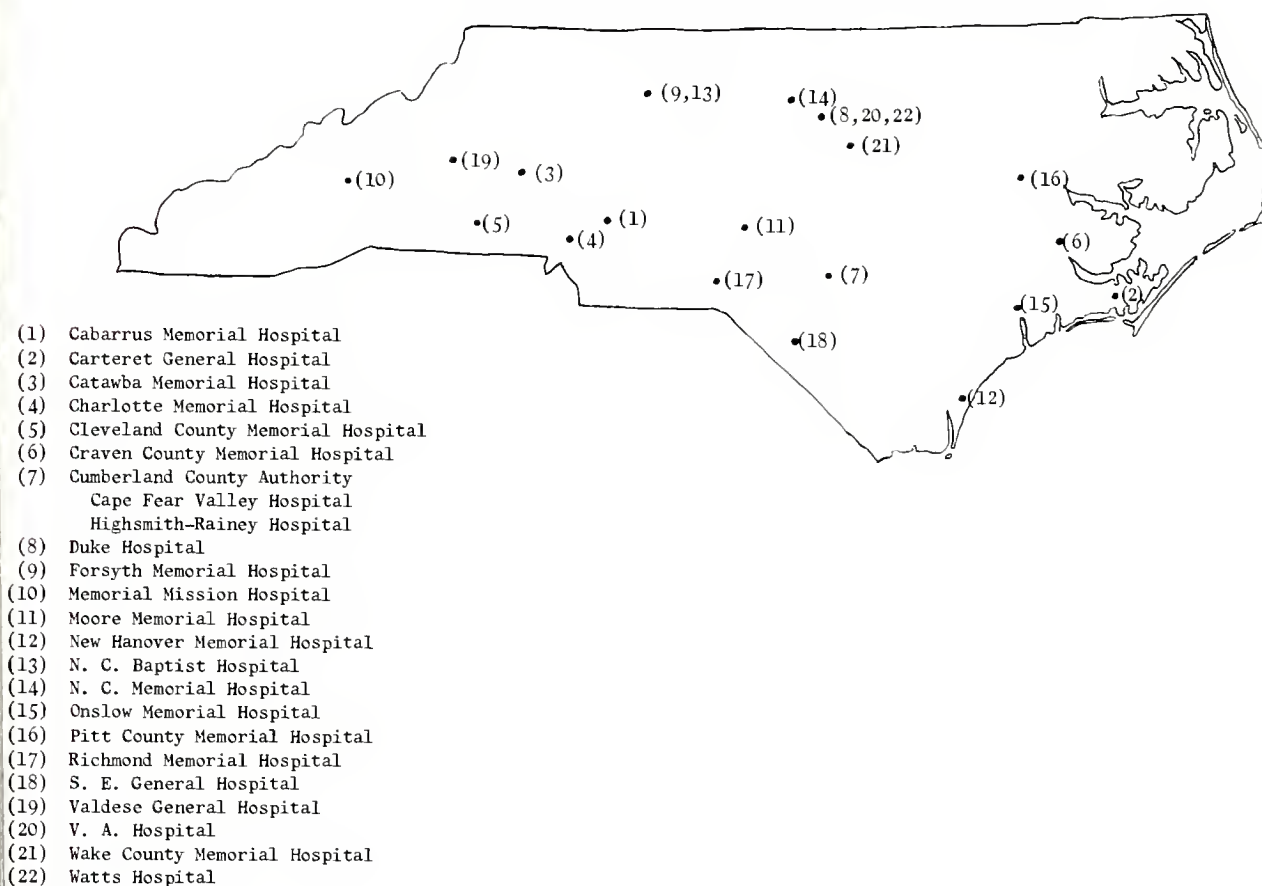
CANCER REGISTRY RATIONALE

A common public health solution to the problems related to fragmentation of the medical care system has been to develop a registry. Hospital cancer registries have been in operation for decades. Their major role has been to assist physicians in following their cancer patients until their demise. Each year clinicians, statisticians, epidemiologists, health planners, and administrators are increasing their demands for information concerning the demographic characteristics, diagnosis, treatment, and the results of treatment of cancer patients. In response to these demands, hospital registries are increasing the amount of data collected about each cancer patient and are publishing periodic reports.

Two problems confronting hospital registries are the maintenance of patient follow-up and the prompt feedback of information. In order to approximate the ideal of 100 percent follow-up of surviving cancer patients, a coordinated effort is required which involves the patient's physician, consultants, relatives and friends of the patient, and state and

NORTH CAROLINA CENTRAL REGISTRY HOSPITALS
Participating Hospitals as of September 1971

Figure 1



CANCER REGISTRY ABSTRACT
N. C. State Board of Health
P. O. Box 2091, Raleigh, N. C. 27602

Figure 2

PATIENT	NAME: Last First Middle Maiden		Social Security Number	
	ADDRESS: Street No./RPD City County State			Hospital File Number
	PLACE OF BIRTH: County State		DATE OF BIRTH: Month Day Year	
	AGE:		NAME OF HOSPITAL	
	RACE: ☐ 1-white ☐ 3-Indian ☐ 2-Negro ☐ 4-other		SEX: ☐ 1-male ☐ 2-female	
	EDUCATION: (circle highest grade completed) elementary high school college		STATUS OF MENOPAUSE: ☐ 1-premenopause ☐ 2-postmenopause	
HISTORY	DATE OF ADMISSION: Month Day Year		DATE OF DISCHARGE: Month Day Year	
	HOW LONG HAS PATIENT HAD THESE SYMPTOMS: no. of months		☐ no symptoms ☐ unknown	
	WAS THIS CANCER POSITIVELY DIAGNOSED BEFORE THIS ADMISSION: ☐ 0-No ☐ 1-Yes		If Yes, specify where and date	
	HAS PATIENT BEEN PREVIOUSLY TREATED FOR THIS CANCER: ☐ 0-No ☐ 1-Yes		If Yes, specify where and date	
DIAGNOSIS	DIAGNOSIS ON DISCHARGE:			Date of Initial Diagnosis
				Diagnosis Code (ICDA-8)
	STAGE OF DISEASE: ☐ 1-in situ ☐ 2-locally invasive ☐ 3-regional nodes ☐ 4-remote metastasis ☐ 5-diffuse disease			
	BASIS OF DIAGNOSIS: ☐ 1-gross autopsy ☐ 2-histology ☐ 3-cytology ☐ 4-X ray ☐ 5-clinical & other			
	HISTOLOGICAL DIAGNOSIS:			Stetology Code (ACB)
COURSE OF TREATMENT	DATE		TREATMENT, DESCRIBE:	
			☐ Surgery (All procedures, including biopsy)	
			☐ Chemotherapy	
			☐ Steroid/Hormone	
			☐ Other	
			☐ No Treatment (specify reason)	
		☐ Post-Operative Radiation		☐ Patient Refused
CONDITION ON DISCHARGE	PATIENT ALIVE: ☐ 1-no evidence of cancer ☐ 2-not free of cancer		PATIENT DEAD: ☐ 5-initial cancer ☐ 6-other, cancer present ☐ 7-other, free of cancer	
	IF DEAD, DATE: Month Day Year		AUTOPSY: ☐ 0-no ☐ 1-yes ☐ 9-unknown	

Form 1-01
 SBH Form 1064 Rev. 3/71
 Chronic Disease

Name of person submitting report

Name of attending physician

Date of report

Figure 2

Figure 3

ANNUAL FOLLOW-UP REPORT TO DETERMINE
SURVIVAL OF CANCER REGISTRY PATIENTS

hospital

file number

Name of patient: _____ Birthdate: _____

Race: _____ Sex: _____ Diagnosis: _____

Physician: _____ Date of last follow-up report: _____

Address of physician: _____

* * * * *

Please complete questionnaire on above named patient and return within 30 days to:

Cancer Registry
N. C. State Board of Health
P. O. Box 2091
Raleigh, N. C. 27602

PATIENT ALIVE	Status: ☐ 1-Without evidence of cancer ☐ 2-With persistence of cancer ☐ 3-Status unknown Quality of survival, due to cancer: ☐ 1-Capable of normal activity, (asymptomatic) ☐ 2-Capable of normal activity, (symptomatic) ☐ 3-Unable to work ☐ 4-Severely disabled, terminal ☐ 9-Unknown	Disposition: ☐ 0-No additional therapy indicated ☐ 1-Additional therapy indicated Treatment since date of last follow-up report: ☐ 1-Surgery ☐ 2-Radiation ☐ 3-Chemotherapy ☐ 4-Hormones ☐ 5-Other ☐ 6-None ☐ 7-Patient refused ☐ 9-Unknown
	Date of death: _____ Autopsy: ☐ 0-No ☐ 1-Yes ☐ 9-Unknown	Cause of death: ☐ 5-Initial cancer ☐ 6-Other cause, cancer present ☐ 7-Other cause, free of cancer ☐ 9-Unknown
PATIENT DEAD		

If patient has moved from your jurisdiction, please note name and address of physician or hospital presently caring for patient, or present address of patient.

Signature of person completing report

Date of report

county health departments. Secondly, the volume of the cancer data generated by the hospital is often too small for statistical reliability or sometimes too large for tabulation and analysis by the hospital registry staff.

The rationale of the central registry program is to encourage the establishment and aid in the optimum operation of hospital registries by helping them solve the problems of patient follow-up, data processing, and feedback.

PROCEDURE FOR THE PROCESSING OF CANCER PATIENT DATA

The North Carolina Cancer Registry is helping hospital registries by providing the cancer patient abstract forms (Fig. 2), and by storing, retrieving, and analyzing the cancer patient data. The secretary of the hospital cancer registry completes an abstract for each patient in accordance with the procedures developed by the central registry staff and described in the handbook provided by the central registry. The original abstract is forwarded by the hospital registry secretary to the central registry; a copy of the abstract is filed in the hospital registry. The central registry staff reviews the abstracts to insure consistency, completeness, and comparability of reporting. Abstracts found to be unsatisfactory are returned to the hospital registry with appropriate queries. Abstracts found satisfactory are coded. Coding procedures have been developed to capture all data recorded on the abstract. The primary sites and treatment are coded according to the 1968 revision of the *International Classification of Diseases*, WHO. The histologic diagnosis is coded according to the *Manual of Tumor Nomenclature* of the American Cancer Society.

The data are then transferred to punch cards. A computer program has been written which makes it possible for the central registry to provide annual reports to each hospital based on their cancer patient data and to provide special reports based upon the data pooled from all the hospitals. This computer program makes cross-tabulation studies possible and computes survival curves. This capability of the central registry to produce a variety of special reports is available to all those interested in conducting cancer research.

PROCEDURES FOR AIDING IN FOLLOW-UP

The central registry aids hospital registries in obtaining a high rate of cancer patient follow-up in the following ways:

a. By supplying to the hospital registries preprinted follow-up forms (Fig. 3) listing patients by month of discharge as a reminder when patients are due for annual follow-up.

b. By providing liaison between participating hos-

pitals concerning admission of patients previously seen in one or more of the other hospitals.

c. By providing liaison between participating hospitals and the state and county health departments, particularly with reference to death certificate information.

The procedures for editing, coding, and processing of follow-up data are similar to those used for the abstracts. In this area, most of the queries come from the hospital registries to the central registry. Often a search for a death certificate or of the central registry's master file is requested by a hospital in order to obtain information about a "lost" patient. This coordination and cooperation results in a higher degree of patient follow-up for the hospital registries and thus will ultimately increase the significance of the survival information. With the passage of time, the latter will become increasingly valuable for studies of clinical and epidemiologic aspects of cancer, as well as a measure of the quality of cancer care.

THE ULTIMATE OBJECTIVE

The immediate objective of the central registry is to encourage the establishment of hospital registries by creating a milieu that engenders confidence in the registry concept and the benefits that can be derived from it. The central registry provides the forms, trains hospital cancer registry secretaries, provides annual and special reports, and is a valuable source of data for use by clinicians, epidemiologists, medical schools, and health departments.

The ultimate objective is to promote the establishment of complete hospital cancer programs. Such a program, consisting of a program of clinical activities (cancer conference, clinic, or board) and a cancer registry, is developed and directed by a committee composed of members of the hospital medical staff. Surgeons, pathologists, internists, radiologists, gynecologists, family practitioners, any and all physicians interested in cancer control form the hospital cancer committee.

The committee has the responsibility of developing educational programs relating to the diagnosis and management of cancer. The availability of reliable information concerning cancer patients and their treatment is vital input for these programs. Therefore, a strong hospital cancer registry is a necessity.

The Cancer Commission of the American College of Surgeons supports the development of hospital cancer programs and has established criteria for their accreditation. (The procedures of the North Carolina Cancer Registry meet these criteria.)

When the hospital cancer program functions effectively, it will attain the goal of all cancer-related programs: Improvement of the care of the cancer patient.

Editorials

BROWN RECLUSE SPIDER BITES

The JOURNAL presents in this issue the first published example of brown recluse spider bite in our state, one in which the identification of the spider was done by the best entomologic standards. Other anecdotal instances are abroad, but no other paper has reached the editorial office or been seen in other medical publications. Some points worth noting are the likelihood that the spiders had been in the building where the bite occurred for a matter of years, and that the ability of the spiders to go months without food or water makes it possible for them to be found virtually anywhere, perhaps by arriving in packing material. Thus no comfort may be derived from earlier descriptions of the distribution of the spider and the reported bites. Difficulties in identification, such as the confusion with daddy longlegs which is mentioned, have probably kept authenticated instances from finding their way into print before now, in this state and elsewhere. Also worth noting is that complete speciation and sex identification are chiefly of academic interest, for all spiders of the group are poisonous and the males just as dangerous as the females.

With increasing evidence that practically all spiders are to some degree venomous, and that the really dangerous kinds are all over, the deep human dislike for spiders which so affected Miss Muffett may turn out to have protective value. As a graduate student of Dr. Olive's remarked "There's nothing can beat stamping the quinine out of a spider." From now on, the spider's lot is going to be an increasingly bad one for mechanical injury, even though chemical injury may slack off as DDT disappears.

ACUPUNCTURE

Beau Brummel once remarked that it was better to be dead than out of style. While this is not the policy of the JOURNAL, we do try to run papers on topics of current interest, and such a one is that on acupuncture appearing in this issue. One of the authors, Dr. Toyama, practices in this state and he is likely the only physician we can claim who has learned the theory and practice of this ancient art (in his case, from his grandmother). In his Winston-

Salem talks and demonstrations he has caused a number of medical men to join the recent visitors to China in thinking that the venerable practice has some modern uses, and has converted some avowed skeptics to grudging believers. Whatever one thinks about the practice, it is relied upon by enormous numbers of human beings, not only in Asia, but latterly in Europe and the United States. It is something physicians need to know about, and we can learn something from what our colleague has to say in this issue.

DR. CALVIN JONES

Writing in the Winter, 1972 issue of the *North Carolina Historical Review*, Dr. Thomas B. Jones gives an interesting account of the medical career of a man instrumental in founding the first medical society in our state. This society, which began about 1799 and lasted for five years, tried to do something for both the public and the physicians, both of whom had a hard time with illness in those years. Dr. Jones had come to North Carolina from New York state and settled in Smithfield. His training was somewhat better than that of most medical practitioners of the day, and he was a man of considerable energy and surgical skill. He read widely, wrote a great deal, and was quite active outside of medicine in such activities as farming, newspapering, slave trading, and land speculation. Indeed, he had to be, for it was then almost impossible to earn a living from medicine alone, a problem shared by other professionals as well as by businessmen; the land remained the basis of people's livelihood in those days.

Dr. Jones' account of the historical Dr. Jones, aside from the portrayal of the man himself, gives the feeling of medical practice in the time before scientific medicine arrived in this country, and before there were legal and organizational assists and restraints available. It is worth reading from that viewpoint alone, for there are times today when many of us rail at those aspects of the medical life, and to hear of Dr. Jones' troubles is to realize that he and our other forebears who contributed to the shape of medicine today did us more of a favor than an ill.

Correspondence

REPORTS ON THERAPEUTIC ABORTION

To the Editor:

This is in reply to the letter by Dr. John R. Gamble, Jr., (NCMJ, April, 1972) raising questions concerning certain questionnaire materials which are requested from time to time for information on physicians, and concerning the reporting of therapeutic abortions to the State Board of Health. Since I have discussed this matter at some length with Dr. Gamble in person at the January Conference of Officers and Committeemen at Pinehurst, I will be brief and direct my attention only to the importance of the therapeutic abortion report form as I see it.

I do not see the analogy of spontaneous abortion to the therapeutic abortion as he does, since spontaneous abortion is a natural occurrence and bears no important relationship to community medical or social problems. The therapeutic abortion appears to me to be vital information, as it may have an impact on population control, treatment of emotional prob-

lems, and other important social implications of pregnancy such as illegitimacy, economic status, etc. The acceptable legal status of the practice of therapeutic abortion, being relatively new, is to a great extent on a trial at this time. I see no way of assessing the desirability or undesirability of therapeutic abortion without as complete information data as possible. This would be equally true for the social impact as well as the medical complications which may occur in the practice of therapeutic abortions. As to the "threat to the privacy of the individual and the additional burden of paper work to the individual physicians," I would comment that the report form is designed *not* to invade any individual person's privacy, and the report form is supposed to be filed by the hospital.

W. JOSEPH MAY, M.D.
Chairman, Maternal Health
Committee

Winston-Salem

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Literary Hemorrhoids

Mrs. S.R., 47, high school English teacher. A history of anorectal pain and burning of several years' duration. On and off weight reducing diets, the insufficient bulk of which has aggravated a chronic constipation problem. Subsequent straining at stool has precipitated an acute episode of internal-external hemorrhoids.



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burning associated
with this and
similar anorectal
conditions

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Each suppository contains hydrocortisone acetate 10 mg, bismuth subgallate 2.25%, bismuth resorcin compound 1.75%, benzyl benzoate 1.2%, Peruvian balsam 1.8%, zinc oxide 11.0%, and boric acid 5.0%, plus the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base.

Precaution Prolonged or excessive use of Anusol-HC might produce systemic corticosteroid effects. Symptomatic relief should not delay definitive diagnosis or treatment.

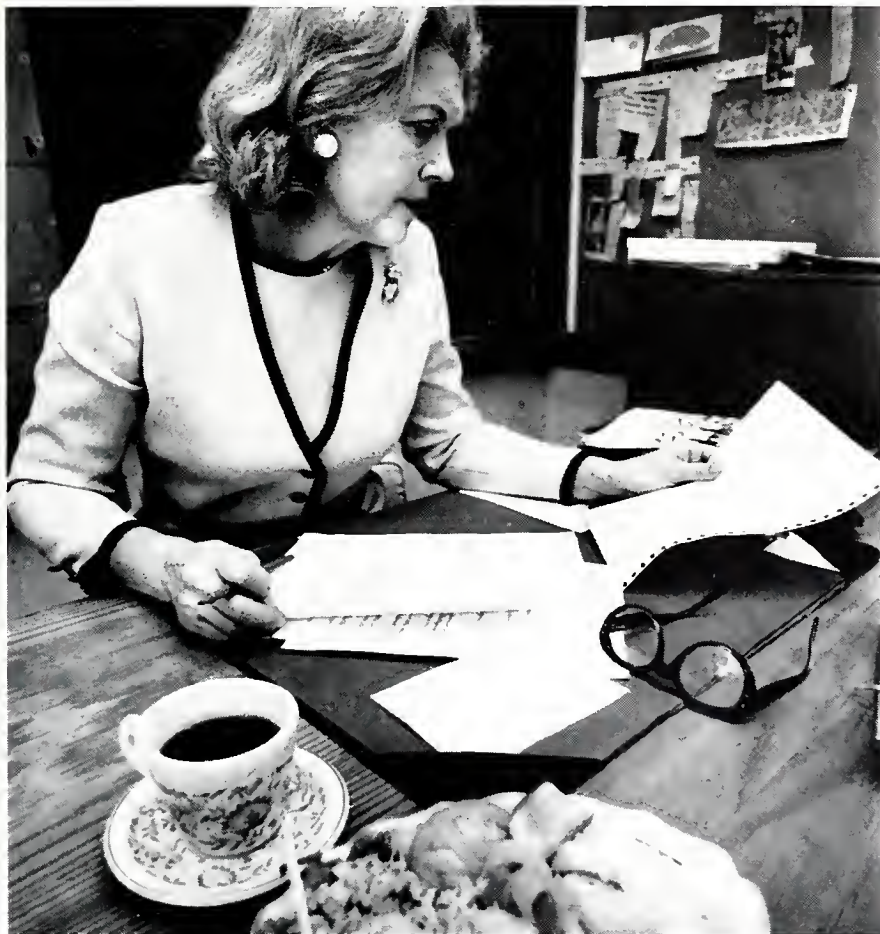
Dosage and Administration Anusol-HC: One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol: One suppository in the morning, one at bedtime, and one immediately following each evacuation.

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Anusol® hemorrhoidal
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Each suppository contains
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 Henry Louis Smith, II, MD, 1700 Abbey Place, Charlotte 28209
 Hugh L. C. Stevens, MD, I, P. O. Box 337, Hazelwood 28738
 William Howard Waugh, MD, I, P. O. Box 2701, East Carolina University, Greenville 27834
 Pierce Eugene Watson, MD, GP, Kinston Clinic, Kinston 28501

WHAT? WHEN? WHERE?

In Continuing Education May, 1972

I. Current Events in North Carolina May 20-24

Annual Meeting, State Medical Society

Place: The Carolina, Pinehurst

For Information: Mr. William N. Hilliard, Executive Director, P. O. Box 27167, Raleigh, 27611

May 23-24

"Rehabilitation of the Stroke Patient"

Place: Carrington Hall, UNC School of Nursing at Chapel Hill

Fee: \$10 (lunch included in fee)

For Information: UNC School of Nursing, Chapel Hill 27514, Phone: 966-1411

May 24-25

"The Shake-Up in Psychiatric Nursing"

Place: Carrington Hall, UNC School of Nursing at Chapel Hill

Co-sponsor: NCSNA, Psychiatric Nursing Conference Group, Continuing Education

Guest Speaker: Mrs. Leif Valand

For Information: UNC School of Nursing, Chapel Hill 27514, Phone: 966-1411

May 26, 1 p.m. thru dinner

New Bern Medical Symposium

Subject: Pediatric Emergencies

Place: Ramada Inn, New Bern

Speakers: Dr. William DeMaria, Duke University, Pediatric Renal Emergencies; Dr. Ramon Canent, Duke University, Pediatric Cardiac Emergencies; Dr. John Knelson, University of North Carolina Respiratory Emergency in Newborns; Dr. Campbell McMillan, UNC, Pediatric Hematologic Emergencies

Dinner Speaker: Mr. Charles Dunn, Director, State Bureau of Investigation, "What Can Be Done About The Drug Problem in North Carolina"

Ladies Program: Registration 1:00 p.m.-2 p.m. — Transportation provided

Tour of Tryon Palace 2:30 p.m.

Tea 4:30 p.m. (Residence of Dr. and Mrs. J. N. Blackerby)

For Information: Zack J. Waters, Jr., M.D. Program Director Craven-Pamlico County Medical Society, P. O. Box 2725, New Bern 28560

May 26-27

Eighth Annual E. C. Hamble Symposium on Reproductive Endocrinology and Family Planning

Sponsored by: The Department of Obstetrics and Gynecology, Duke University Medical Center, Durham

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully coordinated with bacteriologic and clinical response. When the patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture media.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in pregnancy has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias: Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. Allergic reactions: Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. Gastrointestinal reactions: Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. C.N.S. reactions: Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. Miscellaneous reactions: Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarities to some pituitary, diuretic and oral hypoglycemic agents. Glitter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.



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Gantrisin's rapid excretion rate is another reason why it is generally well tolerated. Over 50% of a single oral dose is excreted in 8 hours, over 90% in 24 to 48 hours, so there is little risk of hematuria or crystalluria, and anuria is rare.

As with all sulfonamides, adequate fluid intake must be maintained. Complete blood counts and urinalyses, with careful microscopic examination, should be performed frequently.

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Usual adult dosage:

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Subjects:

- I. Basic Reproduction Mechanisms:
 - II. Clinical Endocrinology
 - III. Fertility Control
- For Information: Dr. Charles B. Hammond, P. O. Box 3143 Department of Obstetrics and Gynecology, Duke University Medical Center, Durham 27710

May 29

Congenital Anomalies of the Cardiovascular System: Thorax
Place: East Carolina University
Fee: \$50
For Information: ECU, Division of Continuing Education, Box 2727, Greenville, 27834

May 29-31

Psychopharmacology and the Aging Patient
Place: Center for the Study of Aging and Human Development Duke University, Durham
For Information: Mrs. Dorothy Heyman, Box 3003, Duke University Medical Center, Durham, 27710

June 1

Rowan-Davie County Medical Society Meeting
Speaker: George T. Harrell, Jr., Md., Dean Pennsylvania State Univ. School of Medicine, Hershey, Pa.
Place: Salisbury Country Club
Social Hour at 6:30 p.m. and Dinner at 7:30 p.m.
For Information: Joseph T. Dameron, M.D., 302 Wallace Bld., Salisbury, N. C.

June 4-9

The Seminar: "Cooperative Program in Continuing Educa-

tion" at Myrtle Beach, South Carolina has been cancelled.

June 14

"Problems of Patients on Long-Term Medication"
Place: Fayetteville
Fee: \$10
Sponsored by: UNC School of Nursing Continuing Education and UNC School of Pharmacy
For Information: UNC School of Nursing, Chapel Hill, 27514, Phone: 966-1411

June 13-14; repeated June 15-16

"Use of Multi-Media in Nursing Education Programs"
Place: Carrington Hall, UNC School of Nursing
Tuition: \$10
Target Group: Faculty in any nursing education program including both schools of nursing and in-service programs
Enrollment limited to 35 per session — applications must be received by May 22
For Information: Sue Chase, R.N., UNC School of Nursing, Chapel Hill, 27514, Phone: 966-1411

June 15-17

"Mountaintop Medical Assembly"
Place: Waynesville
For Information: Jack Dickerson, M.D., Waynesville Surgical Associates, P.A., 1600 North Main Street, Waynesville, 28736

July 2-4

Second Annual Symposium on Sports Medicine
Place: Blockade Runner, Wrightsville Beach, North Carolina
Dinner Speaker Monday, July 3, 8:30 p.m.
Mr. Homer Rice, Director of Athletics, UNC
Sponsor: The Committee on the Medical Aspects of Sports, Medical Society of the State of North Carolina
For Information: Frank C. Wilson, M.D., Chairman, Committee on the Medical Aspects of Sports, N. C. Memorial Hospital, Chapel Hill, 27514

July 23-28

Southern Obstetric and Gynecologic Seminar, Inc.
Place: Grove Park Inn, Asheville
Registration Fee: \$50
For Information: Dr. George T. Schneider, Ochsner Clinic, 1514 Jefferson Highway, New Orleans, La. 70121

Aug. 16-18

Clinical Decision in Cardiology — 3 Days of Cardiology
Place: Holiday Inn, Myrtle Beach
Sponsors: American Heart Association, Council on Clinical Cardiology; Duke University Medical Center; N. C. Heart Association
Fee: \$60, Fellows & members; \$100 non-members of Council on Clinical Cardiology
For Information: American Heart Association, Council on Clinical Cardiology, 44 E. 23rd Street, New York 10010

**II. Coming Events in North Carolina
September 22-26**

State Medical Society Committee Conclave
Place: Mid Pines Club, Southern Pines
For Information: Mr. William N. Hilliard, Executive Director, Post Office Box 27167, Raleigh, 27611

October 16-17

Joint Meeting of N.C.-S.C. Societies of Ophthalmology and Otolaryngology
Place: Blockade Runner Motor Hotel, Wrightsville Beach
For Information: Banks Anderson, Jr., M.D., N. C. Society

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of Ophthalmology and Otolaryngology, Duke University Medical Center, Durham, 27710

III. Out of State (through August, 1972)

May 15-16

Pulmonary Physiology and Pulmonary Function Testing
Place: VA Hospital, Charleston, S. C.

For Information: Mrs. Helen O'Toole, Staff Assistant,
Division of Continuing Education, MUSC, 80 Barre
Street, Charleston, S. C. 29401

May 26

Annual Spring Forum for Child Psychiatry

Place: Medical College of Virginia

Sponsors: Medical College of Virginia, Box 91, Division of
Child Psychiatry, Richmond, Virginia 23219; and Vir-
ginia Treatment Center for Children

May 26-27

Concepts in Health Care Delivery

Fee: \$15

For Information: Meharry Medical College, 1005 18th
Avenue N., Nashville, Tennessee 37208

May 29-31

"The Knee in Sports"

Sponsor: American Academy of Orthopaedic Surgeons

Place: Callaway Gardens, Pine Mountain, Georgia

For Information: Jack C. Hughston, M.D., 105 Physicians
Building, Columbus, Georgia 31901

May 29-June 1

Seminar in Managerial Decision Making for Community
Health Administration

Place: Clemson University, Clemson, S. C.

For Information: Cyril O. Shuler, Industrial Manage-
ment Department, Clemson University, Clemson, S. C.
29631

June 8-11 (8 a.m.-1 p.m.)

"Cardiac Arrhythmias"

Place: Cavalier Hotel, Virginia Beach, Virginia

Sponsors: Council on Clinical Cardiology, American Heart
Association, and Tidewater Heart Association

For Information: Charles L. Baird, Jr., M.D., Medical
College of Virginia, Box 894, Richmond, Virginia 23219

Send information for listing to WHAT, WHEN, WHERE,
Box 8248, Durham, North Carolina, 27704. To be listed
in a specific issue, information must be received by the 10th
of the preceding month. Issues are scheduled for appear-
ance on the 15th of each month.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE WAKE FOREST UNIVERSITY

Dr. Richard L. Witcofski, associate professor of
radiology is the co-author of a new textbook, *Medi-
cal Radiation Biology*.

Co-authored by Dr. Donald J. Pizzarello, former
associate professor of radiology at Bowman Gray,
now an associate professor of radiology at New York

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CATHERINE T. RAY, M.D.

University Medical Center, the book was released recently by the publisher, Lea and Febiger of Philadelphia, Pa.

Written primarily for radiologists and radiology residents, the book is designed to provide basic understanding of the ways in which ionizing radiations and living matter interact.

The 111-page text is the second on which Drs. Witcofski and Pizzarello have collaborated. Their first book, *Basic Radiation Biology*, published in 1967, was designed primarily for beginning students in radiation biology.

The book presents a discussion of basic radiation biology principles and then deals specifically with such topics as radiation genetics, response of tissues and organs to irradiation, effect on developing embryos, treatment of acutely irradiated organisms, and the risk of occupational exposure.

* * *

Dr. James G. McCormick, research assistant professor of otolaryngology at Bowman Gray, in a co-operative project with the U. S. Navy, is attempting to determine why deep-sea divers frequently suffer serious hearing loss.

Four sea lion pups were made available recently by the Naval Undersea Research and Development Center in San Diego, Calif. for use in investigating this problem. The sea lion appears to be an ideal model for the project since it provides an opportunity for studying the diving function as well as the physiology of the ear. The sea lion's hearing range closely compares to that of man.

In the first phase of the project, McCormick measured the electrical potential of the inner ear of the sea lions. He says that they have now determined a stable preparation for measuring the ear reliably over a long period of time. During the research, the animals will be placed in a pressure chamber in which they will undergo simulated dives of various depths. If no hearing loss results, the researchers will concentrate on a study of the physiological parameters—blood chemistry, oxygen exchange, etc.—in an attempt to find ways of preventing hearing loss in human divers.

In addition to the hearing research, the sea lions will serve as models for various other projects.

—Dr. George Brumley of Duke Medical Center will study their lung physiology.

—Dr. Walter Bo, professor of anatomy at Bowman Gray, will study the histology of their ovaries.

—The atherosclerosis research group at Bowman Gray will investigate the animals' large blood vessels.

—Princeton University scientists will collaborate on certain aspects of the hearing research.

* * *

Ten Bowman Gray medical students have been elected to membership in Alpha Omega Alpha, national medical honor society.

Senior students who were tapped for membership

are John D. Bloom of Dover, N. H.; James C. Hoyle Jr. of Roanoke Rapids; Lawrence H. Knott Jr. of Durham; Bruce B. McDonald of Galveston, Texas; Charles H. McLeskey of North Hills, Pa.; R. Neal Reynolds of Burlington; and Miss Laura Winstead of Elm City.

Elected from the junior class were Kenneth R. Gallup, Jr. of Sanford, J. Gregg Hardy of Lexington, and Terry W. Poole of Thomasville.

* * *

The new members will be installed April 18 at the annual banquet of the North Carolina Beta Chapter of Alpha Omega Alpha. Dr. J. Willis Hurst, professor and chairman of the Department of Medicine at Emory University School of Medicine, will deliver the banquet address.

* * *

Dr. Frank C. Greiss, Jr., professor and acting chairman of the Department of Obstetrics and Gynecology, moderated a panel discussion on "Obstetrical Physiology" at the annual meeting of the Society of Obstetrical Anesthesiology and Perinatology, in Denver, Colo.

* * *

Dr. David R. Mace, professor of family sociology, is the recipient of the second annual Award of the American Association of Sex Educators and Counselors. The award, given for outstanding contributions to the field of sex education and counseling, was

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presented during a meeting of the organization in Washington, D. C. Dr. Mace presented a luncheon address during the meeting on "Sex and Culture."

* * *

Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry, has been named an editorial advisor of the *World Journal of Psycho-synthesis*. Psychosynthesis is a union of the various techniques useful in the treatment of patients with psychiatric problems. It places emphasis on family mental health and the prevention of mental problems.

* * *

Dr. Clark E. Vincent, professor of sociology and director of the Behavioral Sciences Center, delivered the keynote address at the American Medical Association's Congress on Quality of Life recently in Chicago, Ill., where he spoke on "An Historical Perspective for the Growth and Development Tasks of Today's Adolescents."

* * *

The Division of Continuing Education and the Department of Pharmacology at the Bowman Gray School of Medicine of Wake Forest University presented a two-day symposium on "Drug Abuse—Recent Advances in Medical and Socio-Legal Aspects of the Problem," May 4-5, 1972, in the Charles H. Babcock Auditorium on the medical center campus.

The Symposium was intended to meet the daily practice needs of the generalist and specialist confronted with the vast medical problem of drug abuse. It was also designed for scientists, students, and other health professionals as well as educators, attorneys, legislative and law officials, and others interested in the drug abuse problem.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Four new faculty appointments have been announced. Three were in the Departments of Medicine and Pathology, while the fourth was a double appointment in environmental medicine and biochemistry.

Appointed to assistant professorships in the Department of Medicine were Dr. Peter F. Pepe and Dr. Harold C. Strauss.

Dr. Pepe comes to Duke from Wilford Hall USAF Medical Center in San Antonio, Tex., where he was chief of the internal medicine section and rheumatology. He received both his medical education and postdoctoral training at Temple University in Philadelphia, Pa.

Dr. Strauss earned his undergraduate and medical degrees at McGill University in Montreal, Canada.

Pre-Sate® (chlorphentermine HCl)

CAUTION: Federal law prohibits dispensing without prescription.

Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e., several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monoamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage in Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage in Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

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or phenmetrazine

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of caloric restriction and diet re-education**

- weight loss comparable to d-amphetamine and
phenmetrazine, superior to placebo
- convenient one-a-day dosage



Following postgraduate work at hospitals in Montreal and New York, he was appointed associate in pharmacology at the College of Physicians and Surgeons of Columbia University in 1971.

Named assistant professor in the Department of Pathology was Dr. Darell D. Bigner. A graduate of the Duke School of Medicine in 1965, he remained at Duke Hospital for his internship and residency in medical neurology. He received his doctorate in immunology in November of 1971.

Dr. Joe M. McCord was appointed an associate in both experimental medicine and biochemistry. He received his Ph.D. in biochemistry at Duke in 1970 and was a postdoctoral fellow in the department before joining the staff.

Also announced were five appointments to the clinical faculty in the division of orthopaedics in the Department of Surgery. They are Dr. Robert E. Musgrave and Dr. Frank H. Stelling, assistant clinical professors, and Drs. Delos W. Boyer, Leslie C. Meyer, and Ronald A. Pruitt, clinical associates.

* * *

Dr. Robert L. Thompson (Ed. D.) has left the Duke Medical Center to head a newly created division of the Association of American Medical Colleges (AAMC) in Washington.

On April 1 he assumed full-time directorship of the Division of Academic Information in the AAMC's Department of Academic Affairs.

Thompson joined Duke in 1957. He went to the medical center in 1966 as executive secretary of the Committee on Admissions.

His most recent position has been an associate director of the Office of Analytical Studies. In that position he has been engaged in a Carnegie Corp. project—the initial effort of its scope in the United States—aimed at analyzing and predicting resources that will be required to meet the overall future needs of education in the health sciences.

* * *

Duke has hired an environmentalist whose job it is to promote health and safety standards in the hospital.

She is Mary Higgins, a young woman who just received her master of science degree in public health with emphasis in environmental protection and management.

Like many other professionals in the field, Mrs. Higgins will keep check on the safety and purity of food served in the hospital, make sure the water system is free from contamination, and monitor waste disposal systems.

Though infection control programs have been in operation at Duke since the hospital was founded, the environmentalists is working on new criteria for the recognition of hospital-acquired infections.

* * *

Dr. Everett H. Ellinwood Jr., associate professor of psychiatry, presented a paper at a meeting of the

American Psychopathological Association in New York City. It was entitled "Chronic Amphetamine Intoxication: Behavioral Model of Psychoses."

* * *

Dr. Merrill Elias, assistant professor of psychiatry, gave two talks at the Jackson Laboratory in Bar Harbor, Maine. The first one, entitled "Applications of Multivariate Analyses to Repeated Measurement Designs," was addressed to the behavioral group. Dr. Elias then spoke on "Memory and Learning in Bailey's Recombinant Inbred Strains" to the entire laboratory staff.

* * *

Statistics for the 1971 fiscal year at Duke Hospital show that the number of inpatient discharges, the number of outpatient visits and the number of babies born were all up from last year.

But the average length of stay per patient was down from 10.16 in fiscal 1970 to 9.70 in fiscal 1971.

The total number of inpatients discharged (not including newborns) was 25,142, up about 2,000 from fiscal 1978.

Outpatients visits totaled 323,540 as compared with just over 300,000 the year before. The fiscal 1971 statistics show that of these outpatient visits, 121,485 were to the public outpatient clinics, 172,091 to the private diagnostic clinics, and 29,964 to the Emergency Department.

New babies born at Duke during fiscal 1971 totaled 2,120 compared with 1,852 the year before.

As would be expected with the increased number of patient visits, both laboratory tests and radiologic procedures showed an increase in 1971.

Lab tests jumped by more than 400,000 from 1,843,139 in fiscal 1970 to 2,246,717 in fiscal 1971. X-rays were up from 152,075 to 165,415.

The number of operations performed also showed an increase—from 12,408 in fiscal 1970 to 13,133 in fiscal 1971.

The number of meals served by the Dietetics Department went from 1,438,118 to 1,532,975.

The total number of pounds of laundry processed in the Hospital decreased in fiscal 1971, due to the increasing use of disposable linens, from 3,733,787 last year to 3,680,599 in fiscal 1971.

Duke's senior medical staff totaled 239 during the year while there were also 456 interns, residents and fellows on the staff.

Hospital employees, not including those who work in the rest of the Medical Center, included 2,647 people.

* * *

Dr. J. Leonard Goldner, professor and chief of orthopaedic surgery, was a visiting lecturer at the Catholic Medical Center in New York City recently. His presentations included "The Management of Clubfeet" and "Residency Training."

Dr. Goldner also attended the annual meeting of

the Pan-Pacific Surgical Association in Honolulu, Hawaii. He was a participant on two panels, "Hand Trauma" and "Hand Reconstruction, Extensor and Flexor Mechanism."

* * *

A new six million-volt x-ray machine, which has distinct advantages over other types of equipment in the treatment of certain cancers, is now in use at Duke.

Dr. Patrick Cavanaugh, chief of therapeutic radiology, said the new equipment does not replace cobalt or other types of therapy for cancer victims.

Instead, he explained, "it is a high-precision, high-output instrument which enables us to achieve a better dose distribution in special situations that require it."

This is particularly important, he said, in the treatment of certain tumors, such as those around the eye, which are located near highly vulnerable or delicate organs.

It also provides advantages in the treatment of deeply located tumors, Cavanaugh said.

The equipment has an auxiliary dose-plotting machine which provides three-dimensional images of the beam which are then used in planning patient treatments.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

Dr. Philip F. Sparling and Dr. Herbert J. Proctor have been tapped by the University of North Carolina School of Medicine as the first two Jefferson Pilot Fellows in Academic Medicine.

The two UNC School of Medicine faculty members will each receive \$2,000 a year for four years to conduct scholarly research in their own specialties.

Dr. Sparling, a specialist in infectious disease, will focus his research on ribosome physiology and mechanisms of antibiotic resistance in bacteria during the years January 1972 through January 1976.

Dr. Proctor, a surgeon, will begin his fellowship this July. He will work on respiratory physiology and tissue oxygenation, or how the body makes use of the air we breathe.

The Jefferson Pilot Fellowships in Academic Medicine were created by the Jefferson Pilot Corporation, Greensboro, in cooperation with the Medical Foundation of North Carolina, Inc.

* * *

An Israeli child growth specialist was recently a visiting professor at the UNC School of Public Health.

Dr. Zvi Shamir who is currently on sabbatical leave from the Hebrew University Medical School

was at Chapel Hill until the end of April teaching and working on research in the Department of Maternal and Child Health.

* * *

Dr. Earl Siegel, professor and chairman of the UNC School of Public Health's Department of Maternal and Child Health, reports that a major focus of his recent trip to Israel was on child bearing and education on the kibbutz, the collective settlements in Israel.

Dr. Siegel was a visiting professor in the department of social medicine, Hebrew University, Hadasah Medical School, during the fall and winter.

During this period he assisted in the teaching of maternal and child health, population and family planning. Besides Israel, Dr. Siegel visited Thailand, Iran, Switzerland and Sweden.

* * *

Three faculty members of the UNC School of Pharmacy were featured April 16-18 at the 92nd Annual N. C. Pharmaceutical Association convention. These included the following: Dr. George P. Hager, dean, on "Pharmaceutical Education and Its Impact on the Practice of Pharmacy"; Claude U. Paoloni, director of Continuing Education, on the School's activities in continuing education; and Dr. David R. Work, assistant dean for fiscal affairs, on "Prepayment—Impact on Pharmacy in the 70's."

* * *

Dr. Howard J. Schaeffer of Burroughs Wellcome Research Laboratories has been named adjunct professor of medicinal chemistry by the UNC School of Pharmacy.

He is presently head of the Organic Chemistry Division of Burroughs Wellcome. He holds the Ph.D. and M.S. degrees from the University of Florida.

* * *

Electrical power, eutrophication of lakes and streams and food contamination and the effects of these on North Carolina were discussed at a three-day seminar for the interested consumer and people in decision-making positions here May 15-17.

Sponsored by the UNC School of Public Health's Department of Environmental Sciences and Engineering, the seminar was intended to clarify North Carolina's present and potential environmental future.

* * *

Counselors from North Carolina high schools, job corps, community organizations, and other settings where young people are deciding on careers came together in Durham April 10-11 for a workshop on "Counseling Minorities for Health Careers."

The two-day program focused on the health manpower needs of North Carolina, the variety of careers open to young people, and the need for encouraging disadvantaged and minority groups to enter health professions at all levels.

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References: 1. Olsen, J.R.: *Journal-Lancet* 85 287 (July) 1965. 2. Giorlando, S.W.: *Ob/Gyn Dig.* 13:32 (Sept.) 1971. 3. Decker, A.: *Case Reports on File, Medical Department, Julius Schmid* 4. Giorlando, S.W., Torres, J.F., and Muscillo, G.: *Am. J. Obst. & Gynec.* 90: 370 (Oct. 1) 1964. 5. Lechevalier, H.: *Antibiotics Annual 1959-1960* New York, Antibiotica Inc., 1960. pp. 614-618. 6. Friedel, H.J.: *Maryland M. J.* 15:36 (Feb.) 1966.

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gram, the workshop is one aspect of the program's efforts to prepare growing numbers of blacks, Indians, poor whites, and Spanish-speaking Americans for health careers and to develop a comprehensive approach to the needs for health professionals in North Carolina.

* * *

Dr. Morris A. Lipton, professor and chairman of the Department of Psychiatry, has been named the 1972 Karl H. Beyer Visiting Professor by the University of Wisconsin.

This award is given annually by the University of Wisconsin Center for Health Sciences to a distinguished scientist who has made significant contributions to medical sciences. This is the first time the professorship has been given to a psychiatrist.

As recipient of this honor, Dr. Lipton visited the Madison campus in April to lecture on his research and confer with colleagues.

* * *

Prof. W. Grant Dahlstrom, chairman of the UNC Department of Psychology, and his wife, Leona Dahlstrom, a clinical psychologist, have just completed a handbook designed to aid psychologists and psychiatrists in identifying and measuring emotional problems.

"An MMPI Handbook: Clinical Interpretation" is a professional manual for clinical psychologists and psychiatrists that can be used in many areas, including university counseling offices, mental hospitals, and mental health centers. It interprets the Minnesota Multiphasic Personality Inventory. This test, the most widely used of its kind, is a screening procedure for locating emotional problems.

The 507-page handbook is the first of a two volume revision of a handbook published in 1960.

* * *

Dr. Walter E. Stumpf, UNC associate professor of anatomy and pharmacology, was an invited speaker at the April 6-7 meeting of the Anatomical Society of Great Britain and Ireland held in Oxford, England.

Internationally recognized for his contributions in the areas of sex hormone action on the brain and other tissue, Dr. Stumpf discussed the "Uptake of Estrogens in the Amygdala-Preoptic-Hypothalamic-Hypophyseal-Gonadal Complex."

* * *

Dr. Merrel D. Flair, director of the UNC Office of Medical Studies, has been elected the first chairman of the new Southern Regional Group on Medical Education of the Association of American Medical Colleges at the organizational meeting held here in Chapel Hill. Southern group is composed of 31 southern medical schools.

* * *

Physicians from eight southern states met here

April 6-7 for two days of discussion on "Leukemia: Acute and Chronic" at the UNC School of Medicine's Sixth Annual Symposium on Malignant Disease.

New aspects and trends in the treatment and therapy of chronic and acute leukemia in children and adults were reviewed by specialists from throughout the United States.

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

F. M. Simmons Patterson, M.D., executive director of the North Carolina Regional Medical Program, was installed as president of the North Carolina Chapter of the American College of Surgeons at its annual meeting held at the Blockade Runner in Wrightsville Beach, N. C. on April 6-8. Dr. Patterson holds a faculty appointment as assistant professor of surgery at the Duke University Medical Center. He attended the University of Pennsylvania Medical School and took his training in Philadelphia. He was a practicing surgeon in New Bern, from 1952 until 1968.

Nine physicians were among those attending the two-day North Carolina Cancer Registry Symposium held on March 15-16 at the Plantation Inn in Raleigh. The Symposium was co-sponsored by the North Carolina Regional Medical Program and the North Carolina State Board of Health. Total attendance was 58, and included registrars, medical record librarians, and members of the East Carolina University Medical Records Department. What cancer is, the principles of treatment, common primary sites, and registry management were among the topics discussed.

* * *

Charles W. Styron, M.D., President of the Medical Society of the State of North Carolina, and John Glasson, M.D., President-Elect, were among the speakers featured at the Conference on Emergency Medical Services sponsored by the North Carolina Regional Medical Program and the North Carolina Hospital Association. Convening at the Sheraton Inn at Winston-Salem on April 19 and The Downtown Holiday Inn in Raleigh on April 20, the conference was attended by those hospital and non-hospital personnel concerned with emergency medical service systems.

Also on the program were Max S. Rittenbury, M.D., associate professor of surgery and director of the Trauma Center at the Medical University of

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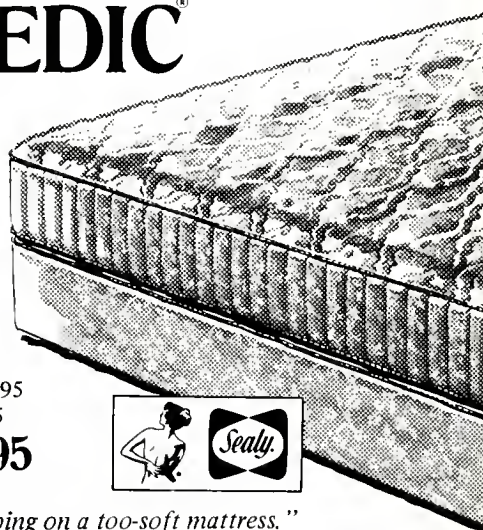


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South Carolina; Mr. William W. Lowrance, Director of NCRMP's Hospital Division; North Carolina Senator F. O'Neil Jones, chairman of the Legislative Research Commission's Committee on Emergency Care; and Mr. John H. Ketner, associate director of N. C. Hospital Association Organizations.

Topics were: "Improving Health Care Delivery Through Emergency Medical Services," "An Emergency Medical Service System: The Major Components"; and "Interests and Inputs of Formal Organizations." "Isn't It a Local Problem" was addressed by Dr. Glasson on April 19 and by Dr. Styron on April 20.

Physicians serving as program panelists were: Thornton R. Cleek, M.D., an Asheboro physician; Thomas B. Dameron, Jr., M.D., a Raleigh Orthopedic Surgeon; George Johnson, Jr., M.D., professor and chief of the Division of Vascular Surgery, UNC School of Medicine; and Wayne H. Stockdale, M.D., Fulltime Emergency Physician, Wayne County Memorial Hospital.

BUREAU OF NARCOTICS AND DANGEROUS DRUGS

Effective May 1, 1972, only Bureau of Narcotics and Dangerous Drugs Official Order Forms are valid for transactions involving Schedule I and II controlled substances, according to an announcement by Alfred A. Russell, Chief, Registration and Audit Division. Any practitioner may obtain the new forms

by forwarding the old type IRS order form requisition (IRS Form 679) to the BNDD Registration Branch, P. O. Box 28083, Central Station, Washington, D. C. 20005.

The registrant's complete, nine-character BNDD registration number must be shown on the form in order that it may be processed. IRS Form 679 will not be honored as a valid requisition for official order forms after April 30, 1972. Therefore, this type of requisition should be submitted as soon as possible. Any registrant who does not now have an IRS requisition, and who desires the new order forms, is required to complete form BND 222D and forward it to the Registration Branch. The BND 222D forms may be obtained from the Registration Branch or any BNDD Regional Office.

AMERICAN COLLEGE OF PHYSICIANS

Three North Carolina physicians have been granted fellowship in the American College of Physicians. They are Dr. Jerome M. Feldman, Dr. Hiroshi Nagaya, and Dr. Abe Walston II, all of Durham.

Dr. Hugh R. Butt of Rochester, Minn., president of the College said that the new fellows have earned this distinction through certification by their specialty boards, presentation of published material, and evidence of scientific accomplishments and academic or hospital affiliations.

Month in Washington

The American Medical Association protested again to the Federal Price Commission that the Administration's economic stabilization program is discriminatory as it applies to physicians.

A detailed statement outlining the AMA's position was sent to the Price Commission March 27 by Dr. Max H. Parrott, chairman of the AMA Board of Trustees, in response to the commission's announcement in the Federal Register that it was seeking a general review of its policies.

The AMA statement emphasized that the Association supports President Nixon's efforts to curb inflation. But, the AMA said, physicians are "very much concerned that the economic restrictions imposed upon them do not have equal application to all segments of the economy."

The AMA recommended that the Price Commission establish a Health Industry Council or Com-

mittee with representatives of the AMA and other health associations as members.

"Such a committee could provide a direct conduit to the Price Commission of the resources, expertise, and experience of its members," the AMA said. Through such a committee the Price Commission would have access to in-depth information accumulated by professional associations in the health care field. Furthermore, a direct channel of communication between the staffs of these organizations and the staff of the Price Commission would provide the Price Commission with assistance not otherwise obtainable.

The AMA expressed confidence that its statement reflected the concern of all physicians regarding the operation of the price control program as it applied to their services. The statement concluded:

"We believe that the comments and suggestions

made in this statement reflect the concern of all physicians regarding the present operation of the price control program as it relates to their services. Accordingly, we urge the Price Commission to eliminate the discriminatory rules which single out physicians and other non-institutional providers of health care. We also call upon the Price Commission to foster a simpler, more equitable system for the enforcement of price controls and the processing of applications for exceptions. An application for an exception not processed within 20 days should be deemed to be approved."

The AMA statement pointed out that professional fees, such as lawyers', outside the health profession were not subject to limitations and that "manufacturers, retailers and sellers of services generally are entitled to full pass-through of their increased costs."

The AMA statement continued:

"Of all sellers of commodities and services, only physicians (and other non-institutional providers of health care) are restricted to an aggregate price increase of 2.5 percent a year in passing through increased costs. We do not believe that this discriminatory restriction is necessary to curb the rate of inflation. If indeed such a restriction were needed, the most effective application would be in those segments of the economy which command the bulk

of the consumer's dollar—food, clothing and housing.

"The regulations divide health care providers into institutional providers and non-institutional providers for price control purposes. This is an artificial and irrational distinction which should be abolished. The plain fact of the matter is that institutional providers frequently provide all, and always provide some, of the kind of services which non-institutional providers sell. . . . * * *

More than 80 members of the House and Senate introduced legislation that would establish a separate Department of Health, a proposal advocated by the American Medical Association for a century.

Chief co-sponsors were a former secretary of Health, Education and Welfare, Sen. Abraham A. Ribicoff (D-Conn.), and the chairmen of two key health subcommittees, Sen. Edward M. Kennedy (D-Mass.) and Rep. Paul G. Rogers (D-Fla.). Twenty-four Democratic senators and 60 representatives, 54 Democrats and 6 Republicans, had signed the bill when it was introduced. Additional sponsors were expected to be added later.

The legislation, which would break up HEW into three departments ran counter to President Nixon's plan for government reorganization. His plan calls for merger of HEW into a new, even bigger Department of Human Resources. Introduction of the separate health department legislation coincided with Nixon's sending of a second special message to Congress urging action on his reorganization proposal.

Some sponsors of the health department bill indicated they might compromise on two departments—one for health and welfare and one for education.

The AMA House of Delegates in 1873 adopted a resolution calling for a separate federal department "as a means of promoting sanitary science and the protection of the public health." In 1891, the delegates approved appointment of a committee "to memorialize Congress at its next session on the subject of creating a cabinet officer to be known as the medical secretary of public health."

Through the years, the House of Delegates has reaffirmed this position, the most recent such action having been in December, 1970, when this resolution was adopted:

"Resolved, That the American Medical Association, in the public interest, continue its efforts to bring about the creation of a separate federal Department of Health, whose chief officer would be a physician of cabinet rank."

"HEW, as presently structured, is unwieldy, unmanageable and therefore unresponsive to both the executive and legislative branches," Ribicoff said in a Senate speech. "No secretary can know what is going on in such a huge department, much less



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maintain control of the operation and policy-making apparatus of such a bureaucracy.

"As a former secretary of HEW, I am convinced that health policy can be more rationally developed and the health programs of our nation better handled if they are placed under the jurisdiction of one agency of manageable size, a department of health."

Ribicoff pointed out that HEW, since its establishment in 1953, has "grown into a bureaucracy of 108,000 employees" with an annual budget of nearly \$79 billion, one-third of the entire federal budget. It allocates \$18 billion of the \$25 billion the government spends each year on health programs that are scattered among 23 other agencies as well as HEW, he said.

His proposal, if enacted, would transfer all health responsibilities of HEW—including administration of Medicare and Medicaid—to the new department immediately. The President would be authorized to transfer health-care functions of other agencies to the department within 180 days of enactment.

The Ribicoff Bill also would set up a 19-member National Advisory Commission on Health Planning to aid in establishment of the department and to undertake a two-year study leading to recommendations for a 10-year national health policy.

* * *

The American Medical Association supports leg-

islation that would amend the Medicare law to expand the circumstances under which payment could be made for services rendered by physicians' assistants.

Payment now is permitted only when the assistant performs the services in the physician's presence. Under an amendment offered in the Senate to H.R. 1, such payment would be allowed where the assistant performs the services without the physician being present. However, an assistant would not be allowed to practice medicine autonomously or without supervision of his physician employer.

H.R. 1 provides for revisions of Social Security, including Medicare and Medicaid.

In a letter to Sen. Gaylord Nelson (D-Wis.), sponsor of the physician's assistant amendment, Dr. Ernest B. Howard, AMA executive vice president, said:

"We believe the amendment to be salutary. As you know, the AMA is fostering the development of appropriate programs to increase the number of physicians' assistants. It is anticipated that such assistants will serve in various ways, and their role can be a valuable one in helping to meet our health manpower needs. In rural settings, for instance, the assistants may serve in communities or areas removed from the physician's office. The Medex program is one example of the assistant serving to extend the physician's services into adjoining areas.

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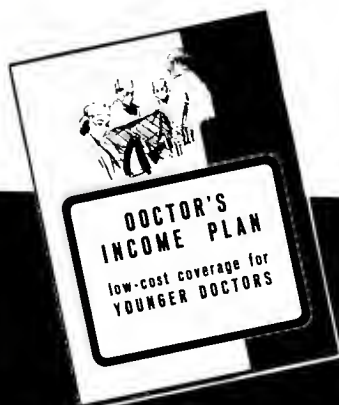
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While delineation of the appropriate role of the physician's assistant, as well as appropriate criteria for certification, are now under formulation, and many programs are in the development stage, we believe your amendment will provide stimulus to the expanding acceptance of these programs."

* * *

The American Medical Association urged that the Lead-Based Paint Poisoning Prevention Act be continued and expanded.

"A substantial percentage of lead poisoning can be traced to the ingestion of chips of lead-based paint by infants," an AMA statement said. "We believe that every reasonable means must be used to reduce this tragic affliction."

The AMA position was outlined in a letter from Dr. Ernest B. Howard, AMA executive vice president, to Sen. Edward M. Kennedy (D-Mass.) chairman of the Senate Health Subcommittee which was considering the extension legislation (S.3080).

"S.3080 also adds a new subsection which

authorizes the Secretary of Health, Education and Welfare to make grants to state agencies for the purpose of establishing centralized laboratory facilities for analyzing biological and environmental lead specimens obtained from local lead-based paint poisoning detection programs," Dr. Howard said.

"This is a proper and important expansion of the program and will provide needed financial support and encouragement to local programs. We would urge that this provision be supported by the committee.

"Other provisions of this legislation are concerned with a revision of the definition of lead-based paints and with increasing the funds authorized to carry on the programs of the Lead-Based Paint Poisoning Prevention Act. The lead content of paint should be kept at the lowest level possible, and we believe that the proposed revision in the definition will materially strengthen the desired objectives of reducing the incidence of this disease. The increased authorizations should also be beneficial in aiding the program to reach a higher degree of effectiveness."

Book Review

Current Diagnosis & Treatment. By Marcus Krupp, M.D., and Milton J. Chatton, M.D. 962 pages. Price, \$11.00. Los Altos, California: Lange Medical Publications, 1972.

The eleventh annual edition of this text contains 926 pages and weighs 3.5 pounds. It measures 10¼ by 7 by 1¾ inches. Within its bulk it contains a broad and shallow stream of medical information which might be of some value if one could determine for whom it was intended. Early editions of this work could be put in the pocket and used by house officers, but now a small rucksack would be required for its transportation. It is inferior to the Barnes Hospital spiral therapeutic handbook and falls short, far short, of the Johns Hospital medical text edited by Harvey and his associates. It is superior to the rival *Current Therapy* if only because more background information is given and the advice is less individualistic. Still there must be a market for the volume else it would not be approaching junior high school age.

The reviewer under such circumstances feels forced to retreat to the recommendations often offered by experts evaluating new automobiles by road tests for *Road and Track* and other periodicals. A favorite in such journals is, "If you like this sort

of car, this is the sort of car for you." The same might be said for *Current Diagnosis and Treatment*, but the effort to find out whether this is the sort of book for you may well not be worth the effort of discovery.

JOHN H. FELTS, M.D.

New Ayerst Film on the Menopause

M. Dorothea Kerr is a well known psychiatrist with long experience in evaluating the emotional problems of the menopausal woman.

In a new Ayerst film, "The Psychohormonal Aspects of the Menopause," Dr. Kerr, assistant attending psychiatrist, Payne Whitney Clinic, New York Hospital, reviews the evidence supporting her conviction that many emotional symptoms in menopausal women usually correlate with their declining estrogen levels.

Using patient interview, discussion, and laboratory demonstration, the film covers this psychoendocrine field with thoroughness and clinical reality.

Dr. Kerr discusses the diagnosis of estrogen deficiency in the menopausal woman, and the value of replacement therapy to help her maintain a full life physically and emotionally.

Medical Society of the State of North Carolina

Major Hospital and Overhead Expense Plans

\$20,000.00 Major Hospital and Nurses Expense Policy —
80 percent — 20 percent Co-Insurance

PLAN A—\$100 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 51.50	\$128.50	\$179.50
40 - 49	78.00	189.00	240.50
50 - 59	114.00	260.50	312.00
60 - 64*	179.00	400.00	451.00

PLAN B—\$300 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 31.00	\$ 71.00	\$ 93.50
40 - 49	47.50	110.00	132.50
50 - 59	74.00	158.50	181.50
60 - 64*	112.50	251.00	273.50

PLAN C—\$500 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 19.50	\$ 43.00	\$ 57.00
40 - 49	32.00	74.00	88.00
50 - 59	51.50	114.00	127.50
60 - 64*	86.50	192.50	206.50
65 - 69	36.00	106.00	119.50

* Renewal rates only—When an Insured Member attains Age 65 he may continue to be insured under the \$500 Deductible Plan which is integrated with Medicare.

Semi-annual premium rates are one-half the annual rate plus fifty cents.

Term Life Insurance Program

Member's Age	\$10,000	\$20,000	\$30,000	\$40,000	\$50,000	Spouse's Age	\$5,000
Under 30	\$ 27	\$ 54	\$ 81	\$ 108	\$ 135	Under 30	\$ 11
30-34	29	58	87	116	145	30-34	12
35-39	38	76	114	152	190	35-39	15
40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
65-69	242	484	726	968	1,210	65-69	97

All Children—\$12 annually. \$2,500 after age 6 months

The above plans qualify for use in the Professional Association. Coverage reduces 50% upon attainment of age 65. Semi-annual premiums are one-half of the annual rate, plus 50 cents.

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In Memoriam

Robert M. Martin, Jr., M.D.

Dr. Robert M. Martin, Jr. died on Feb. 21, 1972 at the age of 47 years. He was born in Florida on March 7, 1924. Dr. Martin received his undergraduate education at Auburn University and his medical degree from Emory University. His postgraduate training was at the Menninger Foundation. He served with the U. S. Army from 1943 to 1946.

Dr. Martin was in private practice at Conyers, Georgia from 1953 to 1961 and was regional medical officer of U. S. Civil Service Commission in Atlanta, Georgia from 1961 to 1965. Since this time, he was engaged in the private practice of psychiatry in Durham. He was also on the staffs of Watts Hospital, the Veteran's Administration Hospital and had an academic appointment at the Duke Medical Center. He was a member of the North Carolina State Medical Society, Medical Association of Georgia, and the American Psychiatric Association.

Surviving are his wife, Mrs. Mary Mason Martin; two daughters, Misses Esther Ann and Mary Matilda Martin; a son, Robert Morris Martin, III; and his mother, Mrs. Robert M. Martin, Sr., of Clayton, Alabama.

DURHAM-ORANGE COUNTY MEDICAL SOCIETY

Leslie Benjamin Hohman, M.D.

Dr. Leslie Benjamin Hohman, 81, professor emeritus of psychiatry at Duke University, died in Baltimore, Jan. 25, 1972. Dr. Hohman was born in Columbus, Ohio, July 18, 1891. He was reared in Kansas City, Missouri and attended the University of Missouri where he earned his bachelor's degree in 1912. He received his medical degree at Johns Hopkins University in 1917. Dr. Hohman served in the U. S. Army in World War I, and in World War II was a commander in the U. S. Navy. He did graduate work in neuropathology at the University of Vienna in Austria.

Dr. Hohman was on the faculty of Johns Hopkins Hospital from 1924 to 1946 and came to Duke in 1946 where he was professor of psychiatry and assistant professor of pediatrics. He was author of more than 90 scientific articles, a great deal of which dealt with child psychiatry.

Dr. Hohman was neuropsychiatric consultant to both the U. S. Army and the U. S. Navy. He was past president of the American Academy of Cerebral

Palsy, past president of the American Psychopathological Association, senior member of the American Neurological Association, a fellow of the American Psychiatric Association, and a member of the American Medical Association. He was also a member of the North Carolina State Medical Society, the Southern Psychiatric Association, and a honorary life member of the North Carolina Society for Crippled Children and Adults. Dr. Hohman was consultant to the state hospital system for many years.

Duke University Medical Center and Durham-Orange County Medical Society have suffered a great loss in Dr. Hohman's death.

DURHAM-ORANGE COUNTY MEDICAL SOCIETY

Harold C. McDowell, M.D.

North Carolina lost a master orthopedist and one of its finest physicians and noblest of men when Harold McDowell died on Feb. 19, 1972, at his home in Winston-Salem.

He was born in Spartanburg, S. C., March 21, 1904, the son of the late Mr. and Mrs. Lindsay McDowell, and was the oldest of three brothers, one of whom was also a physician. Educated in the secondary schools of Spartanburg, S. C. and Cherryville, N. C., he graduated in 1925 from Wake Forest College with a B.S. degree. While at Wake Forest he was president of his senior class, president of the student legislature, then a member of the student council, and a member of Lambda Chi Alpha social fraternity. Thereafter he matriculated at the Jefferson Medical College of Philadelphia, where he graduated in 1931 with an M.D. degree. He served his internship at Cooper General Hospital, Camden, N. J., followed by a one-year residency in obstetrics and gynecology at the New York Lying-in Hospital. He then served a general rotating surgical residency at Westside Hospital, New York City, 1932-1935. Immediately following, he became associated with the internationally renowned orthopedic surgeon, Dr. Fred Albee of New York City, remaining with him for eight years and helping him in the development of the live-bone peg grafts for fractures of the neck of the femur and the apparatus for carrying out this procedure. Moreover, he had an extensive experience in all phases of orthopedics.

When Dr. Albee left New York City and moved his practice to Venice, Fla., Dr. McDowell accom-

panied him and performed much of the surgery for the aging Dr. Albee during the years 1936-1940. After the association with Dr. Albee was broken by the latter's retirement, Dr. McDowell came to Winston-Salem and began the practice of orthopedics.

Prior to his orthopedic training and practice, he had practiced general surgery for one year in Gastonia (1935-1936) after finishing his residency in general surgery at Westside Hospital, New York City.

In 1942 he entered the armed services and after basic training was soon appointed Chief of Surgery and Chief of the orthopedic section of the U. S. Army Oliver General Hospital, Augusta, Ga., where he was stationed in 1942-1947, and was promoted to the rank of colonel. This was a 2,500-bed army hospital designated as an orthopedic center with Dr. McDowell and his staff in charge.

His service record was outstanding. He was cited as having full responsibility for treating 16,123 battle orthopedic casualties and performing 1,946 major orthopedic operative procedures with exceptional results and low morbidity and mortality, for which he received the presidential citation and a U. S. Army commendation ribbon for meritorious service.

In 1947, after an honorable discharge from the armed forces, he returned to Winston-Salem in the private practice of orthopedic surgery, but remained a consulting orthopedist for the Veterans Administration.

Dr. McDowell was on the staffs of City Memorial and, later, Forsyth Memorial hospitals, the Kathryn Bitting Reynolds Memorial Hospital of Winston-Salem, and Rowan Memorial Hospital of Salisbury.

Although not a "joiner" and with little respect for political strivings on the part of physicians, he held membership in the local state and national societies of his specialty and was a senior fellow of the American College of Surgeons.

He was co-author with Dr. Fred Albee of a text, *Surgery of the Spine*.

Dr. McDowell was an exemplary teacher of his specialty and a superb performer with excellent results. Lucky was the patient who fell under his conservative and careful and skilled management of acute fractures and trauma and for reconstructive surgery.

"Dr. Mac," as he was affectionately called by his colleagues and patients, had ultra compassion for the sick and injured and had the love and full confidence of all his patients; despite his rather quick movements and staccato speech, he was the kindest of men and the most attentive of physicians, and his vast experience and sound judgment rehabilitated many patients who would perhaps been invalidated in less knowledgeable and experienced hands.

He was blessed with a keen sense of humor and was completely devoid of professional jealousy and malice; he was always helpful and cooperative with

his colleagues and the younger orthopedists.

Especially dedicated to his family; his wife, a daughter, a son-in-law dentist, and four grandchildren, Dr. McDowell had little time for golf and frivolities and social activities, in that he was the truly dedicated physician. He continued practice for six or more years after repeated coronary occlusions and cardiac infarctions.

Finally he developed carcinoma of the stomach with peritoneal metastasis and postoperative embolic lung complications and died on Feb. 19, 1972.

Every man is both mortal and immortal—mortal in body, but immortal in spirit. Every man attains some degree of immortality; some leave legacies of wasted lives, contributing neither to themselves nor to others. Other men take God's gifts and talents and use them so judiciously and wisely that they benefit not only their own lives but the lives of many others.

"Dr. Mac" had these talents and the wisdom and self-discipline to use them for the benefit of many, thereby establishing a legacy of positive good which was farreaching and rewarding.

All who knew him well appreciated the wholesomeness, skills, and devotion to duty that he perpetually manifested along with unusual kindness, tolerance, and humility. May these qualities live on in us as a memorial to "Dr. Mac."

EVERETT O. JEFFREYS, M.D.

George Wesley Gentry, M.D.

George Wesley Gentry was born in Person County, March 1, 1884. He attended the Roxboro Academy and then Wake Forest College. He graduated from the medical school at the University of North Carolina in 1910. He began his practice at Timberlake in 1910, and continued it there until 1925 when he moved to Roxboro.

In 1930 Dr. Gentry became the physician for the clinic at Collins & Aikman Corporation and held this position until 1964. He was instrumental in starting the first hospital in Person County. This institution was known as the Gentry-Williams Hospital, and in 1950 was replaced by the present Person County Memorial Hospital. Dr. Gentry served as chief-of-staff of this institution for a number of years.

Dr. Gentry was recognized by the North Carolina Medical Society in 1960, when he received his Fifty Year Service Award. In 1965 he was honored by the Roxboro Exchange Club when he was named citizen of the year. He was a member of the Person Masonic Lodge for more than fifty years.

Dr. Gentry had a host of loyal and admiring friends throughout Person County.

Dr. Gentry was a true disciple of Isaac Walton, and spent much of his free time fishing at Buggs Island Lake and Lake Hyco. It was on such a trip to Lake Hyco that he received the final call from his Maker.

Dr. George Wesley Gentry made a sizeable con-

tribution to the lives of the people of Person County during his 87-year life span, and he will be greatly missed.

PERSON COUNTY MEDICAL SOCIETY

Willard Chappell Hewitt, M.D.

Dr. Willard Chappell Hewitt was born in Elizabeth City on Dec. 1, 1912, the son of the late Mr. and Mrs. Robert Clarence Hewitt, who were engaged in farming in that area.

Surviving are his wife, the former Nell Justice and three children, Mrs. Curry Bryan, Miss Verne Hewitt, and W. C. Hewitt, Jr. ("Woody"), four brothers, and two sisters.

"Will" Hewitt was graduated from the University of North Carolina in 1934, receiving an A.B. degree, and obtained his M.A. degree in biology in 1939. He attended the two-year medical school at the University of North Carolina and served as a research fellow in pathology before entering the University of Virginia Medical School where he was graduated in December, 1943.

Prior to entering the United States Navy he served an internship at the University of Virginia Hospital. In 1946-1947 he attended the Graduate Division of Harvard University Medical School. Following this he served as assistant resident in internal medicine at the University of Virginia Hospital. From there he

went to the North Carolina Sanatorium and served as medical director of that institution for a year prior to entering practice in internal medicine at the Kernodle Clinic in Burlington, in 1958.

During his career Dr. Hewitt served as a delegate to the Medical Society of the State of North Carolina, representing Hoke County Medical Society, and was a member of the Alamance County Medical Society.

He was also a member of the American Medical Association, the American Trudeau Society and the American College of Chest Diseases, and the North Carolina Society of Internal Medicine. He served in Alamance County Hospital as chief of internal medicine 1961-1963, and as chief of staff in 1967-1968.

Dr. Hewitt maintained an active interest in community affairs and was a member of the board of directors of the Y.M.C.A. in Burlington.

"Will" was a quiet, gentle person, beloved by his friends and patients, dedicated to his practice, and keenly interested in his patients. He will be missed by them and by his former associates. His favorite pasttimes were flower gardening and hiking.

Dr. Hewitt ceased work in September, 1971 and died at his home on Feb. 11, 1972, of sarcoma of the prostate.

The Alamance County Medical Society has lost a valuable friend and physician.

ALAMANCE COUNTY MEDICAL SOCIETY

SAINT ALBANS PSYCHIATRIC HOSPITAL

(A Non-Profit Organization)

Radford, Virginia

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AFFILIATED CLINICS

Bluefield Mental Health Center
525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
Leslie J. Borbeck, M.D.

Mental Health Clinic
Professional Building, Wise, Va.
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Medical Society of the State of North Carolina

SECOND ANNUAL SYMPOSIUM ON SPORTS MEDICINE

BLOCKADE RUNNER
WRIGHTSVILLE BEACH, N. C.

July 2-4, 1972

AAFP CREDIT BEING REQUESTED TENTATIVE PROGRAM

Sunday, July 2

- 4:00- 6:00 P.M. Registration — Lobby
6:30 P.M. Shrimparoo — Patio — Informal

Monday, July 3

Moderator: Frank C. Wilson, Jr., M.D.

- 8:30- 9:00 A.M. Registration — Lobby
9:00- 9:15 A.M. Introduction Frank C. Wilson, Jr., M.D.
9:15- 9:30 A.M. Relationships of Athletics to the School System.....Raymond K. Rhodes
9:30-10:00 A.M. Legal Liability in High School Athletics.....John T. Hayes, M.D.
10:00-10:30 A.M. Physical Examination of the Athlete.....James R. Dineen, M.D.
10:30-11:00 A.M. Coffee Break
11:00-11:30 A.M. Conditioning of the Athlete.....John Lacey
11:30-12:30 P.M. Taping and Strapping Demonstration.....Frank H. Bassett, III, M.D.
John Lacey
8:30 P.M. Dinner (coat and tie) — Lee Room
Guest Speaker: Homer Rice
Director of Athletics, University of North Carolina

Tuesday, July 4

Moderator: Frank W. Clippinger, Jr., M.D.

- 9:00- 9:30 A.M. Use and Misuse of Local Anesthetics.....Basil M. Boyd, M.D.
9:30-10:00 A.M. Heat Syndrome Joseph L. DeWalt, M.D.
10:00-10:30 A.M. Tendon and Ligamentous Injuries.....Donald B. Reibel, M.D.
10:30-10:45 A.M. Coffee Break
10:45-11:15 A.M. Epiphyseal Injuries in the Athlete.....H. Robert Brashear, M.D.
11:15-11:45 A.M. Injuries of the Hand and Wrist.....John W. Packer, M.D.
11:45-12:15 P.M. Rehabilitation of the Athlete.....Richard N. Wrenn, M.D.

Sponsored by: Committee on Medical Aspects of Sports
ADVANCE REGISTRATION REQUESTED

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES: NORTH CAROLINA,
FEBRUARY 1972 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE					
	PERINATAL DEATHS		Total Deliveries	March 1971 - Feb. 1972	Perinatal Rate Per 1,000 Deliveries	PERINATAL DEATHS		Total Deliveries	March 1971 - Feb. 1972	Perinatal Rate Per 1,000 Deliveries		PERINATAL DEATHS		Total Deliveries	March 1971 - Feb. 1972	Perinatal Rate Per 1,000 Deliveries						
	February 1972	March 1971 - February 1972				February 1972	March 1971 - February 1972					February 1972	March 1971 - February 1972									
NORTH CAROLINA	150	1743	67589	26.8		86	1258	28990	43.4													
ALAMANCE	3	33	1225	26.9		1	15	420	35.7		PENDER	2	4	158	-		2	155	-			
ALEXANDER	1	14	346	40.5			1	34	-		PERQUIMANS	1	1	71	-			50	-			
ALLEGHANY	1	3	122	-				6	-		PERSON	1	8	278	28.8		9	218	41.3			
ANSON		6	196	30.6		1	15	272	55.1		PITT		20	654	30.6		6	663	33.2			
ASHE	2	11	291	37.8				1	-		POLK		2	141	-		1	29	-			
AVERY		12	235	51.1					-		RANDOLPH	1	41	1230	33.3		6	108	55.6			
BEAUFORT	1	10	407	24.6		1	13	241	53.9		RICHMOND	2	13	455	28.6		1	13	292			
BERTIE		7	103	68.0		1	10	254	39.4		ROBESON	1	14	639	21.9		2	66	1675			
BLADEN		4	251	-			5	215	23.3		ROCKINGHAM	2	32	999	32.0		2	25	412			
BRUNSWICK		3	359	-		1	10	172	58.1		ROWAN	2	22	1189	18.6		2	16	340			
BUNCOMBE	5	58	1984	29.2		1	16	268	59.7		RUTHERFORD		20	690	29.0		2	6	162			
BURKE	2	23	1029	22.4			7	87	-		SAMPSON	3	8	428	18.7		1	19	328			
CABARRUS	4	21	975	21.5		3	9	308	29.2		SCOTLAND	2	14	317	44.2		1	13	310			
CALDWELL	5	21	1056	19.9			4	96	-		STANLY	4	16	642	24.9		2	9	120			
CAMDEN		5	60	-				42	-		STOKES		7	377	18.6		3	67	-			
CARTERET		14	537	26.1			1	78	-		SURRY	4	28	861	32.5		2	50	-			
CASWELL		9	154	68.4		11	176	62.5	-		SWAIN			114	-		1	70	-			
CATAWBA	2	50	1542	32.4		9	234	38.5	-		TRANSYLVANIA	1	13	273	47.6			27	-			
CHATHAM	1	11	326	33.7		5	163	30.7	-		TYRRELL		1	21	-		1	4	32	-		
CHEROKEE		9	267	33.7		1	12	-	-		UNION	2	21	785	26.8		1	21	362	58.0		
CHOWAN		3	88	-			3	110	-		VANCE		6	329	18.2		4	16	347	46.1		
CLAY		2	87	-				1	-		WAKE	10	74	2963	26.0		5	45	1105	40.7		
CLEVELAND	3	39	1013	38.5		2	18	392	45.9		WARREN		3	70	-		1	10	188	53.2		
COLUMBUS	2	22	569	39.4		1	14	380	36.8		WASHINGTON		1	127	-		1	16	136	117.6		
CRAVEN	2	30	1184	25.3		1	18	400	45.0		WATAUGA	2	11	347	31.7			1	7	-		
CUMBERLAND	11	81	3888	20.8		2	63	1647	38.3		WAYNE		33	1173	28.1		2	26	618	42.1		
CURRITUCK		1	81	-				42	-		WILKES	3	29	857	33.8			3	56	-		
DARE		3	99	-				8	-		WILSON		9	495	18.2		1	16	523	30.6		
DAVIDSON	5	44	1570	28.0		17	252	67.5	-		YADKIN		11	373	29.5				25	-		
DAVIE	1	9	284	31.7		3	68	-	-		YANCEY	1	7	207	33.8				2	-		
DUPLIN	1	9	415	21.7		11	302	36.4	-		City totals are also included in county totals											
DURHAM	5	38	1339	28.4		2	41	922	44.5		ALBEMARLE		2	151	-		1	36	-			
EDGECOMBE		7	411	17.0		2	21	499	42.1		ASHEBORO		4	205	-			23	-			
FORSYTH	7	53	2561	20.7		32	1193	26.8	-		ASHEVILLE	3	23	639	36.0		1	15	243	61.7		
FRANKLIN		3	195	-		14	246	56.9	-		BURLINGTON	2	17	486	35.0		4	145	-			
GASTON	1	58	2590	22.4		3	23	491	46.8		CHAPEL HILL		9	264	34.1		1	2	58	-		
GATES		2	59	-			4	83	-		CHARLOTTE	4	57	2824	20.2		3	86	2064	41.7		
GRAHAM		2	105	-			7	-	-		CONCORD	1	6	182	33.0		3	122	-			
GRANVILLE	13	219	59.4			19	336	56.5	-		DURHAM	1	21	809	26.0		2	34	804	42.3		
GREENE		5	80	-		7	123	56.9	-		EDEN		6	194	30.9		2	4	61	-		
GUILFORD	4	82	3515	23.3		5	69	1653	41.7		ELIZABETH CITY		4	121	-		2	3	99	-		
HALIFAX	3	16	399	40.1		1	26	583	44.6		FAYETTEVILLE	6	27	1020	26.5		1	38	620	61.3		
HARNETT	4	12	642	18.7		1	25	304	82.2		GASTONIA	1	23	734	31.3		2	9	246	36.6		
HAYWOOD	1	16	688	23.3				16	-		GOLOSBOBO		7	284	24.6		2	12	263	46.6		
HENDERSON	1	23	698	33.0				42	-		GREENSBORO	1	39	1704	22.9		2	46	1069	43.0		
HERTFORD		1	138	-		1	14	255	54.9		GREENVILLE		8	267	30.0		1	5	193	25.9		
Hoke		2	121	-			12	242	49.6		HENOERSON		2	149	-		4	145	-			
HYDE		4	39	-			4	59	-		HICKORY	1	15	302	49.7		4	114	-			
IREDELL	1	25	956	26.2		13	342	38.0	-		HIGH POINT	1	22	775	28.4		2	16	416	38.5		
JACKSON		7	279	26.1		2	57	-	-		JACKSONVILLE		12	387	31.0		1	2	70	-		
JOHNSTON	3	19	774	24.5		1	20	291	68.7		KINSTON	1	8	248	32.3		2	13	228	57.0		
JONES			84	-		1	2	91	-		LENOIR		2	194	-		2	50	-			
LEE	2	11	438	25.1		1	10	190	52.6		LEXINGTON	2	14	262	53.4		6	91	-			
LENOIR	2	18	547	32.9		2	26	450	57.8		LUMBERTON		4	218	-		10	200	50.0			
LINCOLN	1	17	548	31.0		4	111	-	-		MONROE		1	127	-		1	9	108	83.3		
MCDOWELL	2	14	524	26.7			2	49	-		MORGANTON		5	122	41.0		2	25	-			
MACON		5	229	21.8				9	-		NEW BERN		3	157	-		6	140	42.9			
MADISON	1	13	249	52.2				3	-		RALEIGH	5	40	1367	29.3		4	34	580	58.6		
MARTIN	1	2	207	-		2	14	261	53.6		REIOSVILLE		3	145	-		8	107	74.8			
MECKLENBURG	8	87	4597	18.9		3	98	2387	41.1		ROANOKE RAPIDS		6	194	30.9		3	34	-			
MITCHELL	1	4	206	-				1	-		ROCKY MOUNT E		1	98	-		1	5	130	-		
MONTGOMERY		4	246	-			6	126	47.6		ROCKY MOUNT N		4	237	-		1	7	105	-		
MOORE	1	17	468	36.3		1	15	254	59.1		SALISBURY		4	186	-		1	5	150	33.3		
NASH		8	612	13.1		1	12	506	23.7		SANFORD	1	4	161	-		5	81	-			
NEW HANOVER	1	27	1237	21.8		1	18	457	39.4		SHELBY		9	164	54.9		3	106	-			
NORTHAMPTON		2	97	-		3	17	319	53.3		STATESVILLE		6	212	28.3		6	174	34.5			
ONSLow	4	59	2392	24.7			10	415	24.1		THOMASVILLE	1	6	208	28.8		8	92	-			
ORANGE	1	20	750	26.7		2	17	223	76.2		WILMINGTON	1	15	554	27.1		1	17	396	42.9		
PAMLICO		2	87	-		1	4	73	-		WILSON		3	242	-		8	243	-			
PASQUOTANK	9	267	33.7			3	7	173	40.5		WINSTON SALEM	2	23	1197	18.2		32	1132	28.3			

Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

NORTH CAROLINA

Medical Journal

IN THIS ISSUE: Hyperalimentation: Value and Technique, Paul M. James, Jr., M.D., Louis Shaffner, M.D., and Archie Johnson, M.D.; Breast Reconstruction, Nicholas G. Georgiade, M.D.; Ten Years' Experience in Pediatric Group Practice, D. Russell Perry, Jr., M.D.; After Hours Pediatric Practice, Charles I. Lahser, M.D.



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PRESIDENT'S NEWSLETTER

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

No. 1

June 9, 1972

The President's Newsletter, instituted by Louis Shaffner, M.D., and continued during the past year by Charles W. Styron, M.D., has been successful as a source of timely brief news items of both state and national interest to members of the North Carolina Medical Society.

With the finally ratified name change to "North Carolina Medical Society" passed at the recent meeting of the House of Delegates, it will be my privilege to continue preparation of the monthly newsletter during my coming year as "first President of the North Carolina Medical Society."

The following other officers were elected at the May 20-24, 1972 meeting in Pinehurst:

President-Elect - George G. Gilbert, M.D., Asheville
First Vice-President - Frank R. Reynolds, M.D., Wilmington
Second Vice-President - Harry H. Summerlin, Sr., M.D., Laurinburg
Speaker, House of Delegates - James E. Davis, M.D., Durham (re-elected)
Vice-Speaker, House of Delegates - Chalmers R. Carr, M.D., Charlotte
(re-elected)

Delegates to the American Medical Association and Alternates, for two-year terms beginning January 1, 1973 and expiring December 31, 1974 were elected as follows:

Delegates -- Donald B. Koonce, M.D., Wilmington (re-elected)
Frank W. Jones, M.D., Newton (re-elected)

Alternate Delegates -- James E. Davis, M.D., Durham (re-elected)
Louis deS. Shaffner, M.D., Winston-Salem

Other officers serving unexpired terms include:

Secretary -- E. Harvey Estes, Jr., M.D., Durham

AMA Delegates -- Amos N. Johnson, M.D., Garland
David G. Welton, M.D., Charlotte

AMA Alternate Delegates -- Edgar T. Beddingfield, Jr., M.D., Wilson
John Glasson, M.D., Durham

Noteworthy Actions of the House of Delegates of the North Carolina Medical Society were as follows:

Endorsed the expansion of the role of the registered nurse as a nurse practitioner as a practical means of meeting some of the health care needs of the people of the State, but that such expansion be done only when the nurse practitioner has a clearly defined relationship to a licensed practicing physician or physicians who bear medical responsibility for those parts of the nurse's role that go beyond the bounds of traditional nursing practice.

The development of the nurse practitioner to be accomplished under the supervision of a joint subcommittee of the Board of Medical Examiners and the Board of Nursing.

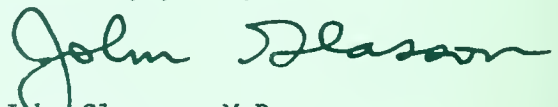
Resolved that the Society explore the various methods of compulsory continuing medical education, with special reference to those methods used in the state of Oregon.

Approved a Reference Committee substitute resolution for one submitted by Duke University Medical Student members and the Durham-Orange County Medical Society that the Society go on record as considering an abortion to be an elective surgical procedure which should only be performed by a licensed physician; that the decision to perform an abortion should be made by the woman and her physician; recognizing that the physician has the responsibility in each instance to make sure that his patient has fully considered the alternative to terminating her pregnancy and is not being coerced into seeking an abortion. The resolution also condemned the operation of profit-making abortion referral agencies and resolved that the Society do all that it can to see that no such agencies are established in North Carolina.

Adopted a policy rejecting any determination of professional fees by a third party (such as insurance companies) and emphasizing that fee negotiations should take place appropriately between the physician and the patient based on the concept of usual, customary, and reasonable.

The AMA Newsletter of May 29 also reported significantly that an organizer of the Union of American Physicians, Sanford A. Marcus, M.D., Daly City, Calif., wrote recently to AFL-CIO President George Meany regarding affiliation. Dr. Marcus reports he received a reply from a Meany aide who said a physicians' union is "inappropriate" at this time because physicians are "employers." Dr. Marcus said the aide wrote: "In five to ten years, when most of you are employees, we will be very interested in you."

Sincerely yours,

A handwritten signature in dark ink, appearing to read "John Glasson". The signature is fluid and cursive, with the first name "John" and last name "Glasson" clearly distinguishable.

John Glasson, M.D.
President

JG/dg

Hyperalimentation: Value and Technique

Paul M. James, Jr., M.D., Louis deS. Shaffner, M.D.,
and Archie T. Johnson, M.D.

THERE is a systemic response to trauma or illness at the glandular and cellular levels altering normal body biochemistry. Stimulation of the hypothalamic-pituitary-adrenal axis results in a catabolic state greater than that elicited by starvation alone.

Secretion of antidiuretic hormone (ADH), increased serum cortisol levels, and epinephrine are pronounced. Aldosterone is also secreted. There is a resultant catabolism (negative nitrogen balance*), sodium retention, and urine concentration.

Injury requires energy to maintain body temperature, cardiac and respiratory muscle function, and an increased visceral metabolic rate. More energy is needed in the healing process than is needed to maintain the organism in a normal state. The minimal stored carbohydrate reserve (400-500 gm) is rapidly depleted and energy is then obtained from endogenous fat and protein stores.¹ The body will generate about 300 calories by obtaining 50 percent each from fat and protein. It should be kept in mind that approximately 1 gm of nitrogen is present in 6.25 gm of protein, and this will build 32 gm of lean tissue mass. The significance of daily urinary nitrogen losses of between 15 to 125 gm becomes impressive.¹ Normal healthy body requirements are 1 gm of protein per kilogram per day (see Tables 1 and 2).

Some type of therapy to reverse these trends is necessary when normal requirements are exceeded or when normal routes of nutrition are not available. These can be categorized as (1) states of excessive need, (2) those of inadequate means to ingest normal replacement, and (3) states of excessive protein and energy losses.

The convalescing burn patient and patients with inflammatory, obstructive or other gastrointestinal

disease such as fistulas or malabsorption exemplify these conditions. Patients who are chronically septicemic or debilitated and are being prepared for surgery, or those who are just being treated to convert them to an anabolic state are candidates for hyperalimentation. Patients receiving radiation therapy or chemotherapy, who are cachectic and anorectic, are also good candidates.

METHODS

Basically, when protein and caloric needs are increased, no matter what the cause, hyperalimentation can be carried out in one of two ways.

Elemental diet

The first regimen is the elemental diet[†] suggested by Randall and associates.² This diet is composed of the eight essential amino acids and a sucrose or glucose base. It contains all the micro and macro elements needed for daily nutrition except cobalt and vitamin K, 10 mg given three times a week. The diet may be given orally, by tube or by jejunostomy, and is reconstituted on a weight-volume basis as a clear solution up to 25 percent volume by weight. It is better to start with smaller volumes, concentrations of 5 to 15 percent, and administer continuously over 24 hours with a Holter, a Harvard, or another continuous infusion pump.

The regimen will provide adequate calories and protein. The solution is absorbed in the duodenum or the first 100 cm of the jejunum. It is bulk free and thus results in decreased stool volume and frequency, and it does not stimulate pancreatic or intestinal secretion. One problem with this form of therapy: if the diet is given by tube, silent regurgitation can occur and aspiration will follow. There-

From the Departments of Surgery (Drs. James and Shaffner) and Pediatrics (Dr. Johnson), Bowman Gray School of Medicine, Winston-Salem, N. C.

Request for reprints to the Department of Surgery, Bowman Gray School of Medicine, Winston-Salem, N. C. 27103 (Dr. James).

* Excess of N excretion over ingestion.

† Vivonex-100, available from Eaton Laboratories, Norwich, New York.

Table 1

5% Amigen* (Casein Hydrolysate)/5% Dextrose
(all per liter solution)

Protein	37-40 gm†
Calories	340
Sodium	35 MEQ
Potassium	18 MEQ
Calcium	5 MEQ
Magnesium	2 MEQ
Chlorides	22 MEQ
Phosphates	30 MEQ

* Baxter Laboratories, Morton Grove, Illinois

† Containing 8 essential amino acids

Table 2

5% Aminosol* (Fibrin Hydrolysate)/5% Dextrose
(all per liter solution)

Protein	50 gm†
Calories	345
Sodium	10 MEQ
Potassium	17 MEQ
Calcium	0
Magnesium	0
Chlorides	20 MEQ

* Abbott Laboratories, North Chicago, Illinois

† Containing 8 essential amino acids

fore, this feeding has been withheld at night in some cases.

Hypertonic solutions

The other and much more discussed method is the parenteral administration of fluids. The solutions are usually prepared in the pharmacy or the unit where they are given. They must be mixed under meticulous sterile precautions and given continuously through a large vein as the portal of entry, since the hypertonicity of the solutions will thrombose or damage peripheral veins. Prepared solutions should not be older than 20 hours and should be kept refrigerated.

Dudrick, Wilmore, Vars, and Rhoads³ are pioneers in the particular method of therapy outlined here. These solutions are composed basically of fat free amino acid and glucose solutions, with water and fat soluble vitamins as well as trace elements added—that is, a 20 percent solution of glucose with 5 percent fibrin hydrolysate. Percutaneous or surgical placement of these catheters in the upper part of the body will be alluded to later.^{5, 6} Plasma in increments of 20 cc/kg of body weight is given twice a week as fresh frozen plasma, as well as 10 mg vitamin K₁ oxide given intramuscularly three times a week. Iron requirements are met by blood transfusion or weekly parenteral injections of iron dextran complex. There is some evidence that parenteral therapy causes erythroid hypoplasia in the same manner. The solution may be made from the powder form of the preparation, using 860 cc of 5 percent Aminosol in 5 percent dextrose (Abbott Laboratories) and adding 165 gm of anhydrous dextrose. We prefer to mix the solution by using 750 cc of

5 percent Aminosol/5 percent dextrose, and 350 cc of 50 percent dextrose solution. This mixture is not quite as high in calories or nitrogen per liter, but the ease of the method justifies the minor difference. (Dry method: 100 cal/1000 cc, 6 gm N/1000 cc; wet method: 1000 cal/1100 cc, 5.25 gm N per 1100 cc). Electrolytes, vitamins, and trace elements are added to this solution as needed. The two methods mentioned above are for making up the fresh frozen plasma; zinc, other trace elements, and essential fatty acids are given twice a week (20 cc/kg). Vitamin B₁₂ must be given at infrequent intervals.

Table 3 shows the constituents of a typical balanced mixture. It is important to keep the potassium elevated since as much as 150 mEq may be required in the course of a day when therapy is in progress. This is because potassium is incorporated in the cells for cellular synthesis and is also lost in the urine. Potassium is usually added to the basic solution together with the needed electrolyte calculated from the maintenance requirements and the abnormal losses from the individual.

Tables 3, 4 and 5 show the dry and wet methods of reconstituting the solution and also the minimal daily needs of the patient.

Amigen or Aminosol may be used. The difference between these two are noted in Tables 1 and 2. Our preference is Aminosol because it is a fibrin hydrolysate. Table 2 shows a formula for easy hospital use and mixture of the wet solution type. The average adult needs are seen in Table 6.

Infant care

In the case of the neonate, the metabolism of glucose differs greatly, and a 10 percent solution of glucose itself may prove excessive for the infant's immature metabolic system. In addition, he probably

Table 3

Ideal Methods Using Materials at Hand

750 cc	Protein hydrolysate (Aminosol, Amigen) in 5% dextrose
350 cc	50% dextrose/water
30 cc	5% sodium chloride*
30 MEQ	potassium chloride
3 cc	MVI

Contains 910 calories and 5.7 gm protein/liter

* Contains 30 MEQ of NaCl in solution

Table 4

8 Essential Amino Acids	Minimal Daily Need	1000 cc of 5% Aminosol Gives
1. 1—leucine	0.7 gm	2.18 gm
2. 1—leucine	1.1 gm	6.36 gm
3. 1—lysine	0.8 gm	4.0 gm
4. 1—methionine	1.1 gm	1.0 gm
5. 1—phenylalanine	1.1 gm	1.0 gm
6. 1—threonine	0.5 gm	2.32 gm
7. 1—tryptophan	0.25 gm	0.5 gm
8. 1—valine	0.8 gm	1.63 gm

Table 5

Body fluid compartments	% Body Weight	
	Male	Female
A. Extracellular fluid		
1. Plasma	20 { 4	20 { 4
2. Interstitial water	16	16
B. Intracellular	40	30
C. Total Body Water	60	50

Table 6

Protein (as amino acid*)	33.0 gm
Glucose	200.0 gm
Sodium†	5.0 MEQ
Potassium†	16.0 MEQ
Chloride†	11.7 MEQ
Calcium	183.0 mg
Magnesium	30.6 mg
Phosphorus	67.0 mg
Multivitamin infusion (MVI)	5.0 ml
Folic Acid	0.45 mg

* Aminosol is a fibrin hydrolysate

† Adjusted as needed at bedside

needs about one half as much protein as most formulas calculate, and some fructose should be added to make up the needed calories. Gentle, careful therapy and close monitoring with microscopic studies must be carried out with these infants in order to treat them appropriately and monitor their delicate metabolic and acid base balances. These fragile children are best managed where they can be monitored on a 24-hour basis. Good judgment suggests that a practical solution is to transfer them to a center with a metabolic unit to care for the minutiae, which are essential for their survival. Starvation from malformations of the gastrointestinal tract, which has caused great increases in infant mortality, is being combated by the centers. If the infant can be kept alive, as was Dudrick's patient,¹ even a small percentage of the small intestine being left may in time mature enough to be adequate for growth and development. Meanwhile the child will grow and develop normally on parenteral medication.

Protein

Protein must be given over a period of 24 hours in order to obtain protein synthesis. Protein given sporadically will be converted to glucose and the glucose to fatty acid; therefore, protein should be given with glucose 24 hours a day, in equal increments. The body, as mentioned before, is capable of tolerating 1.2 gm per kilogram of glucose per hour administered intravenously. Insulin is stimulated by intravenous glucose and promotes the transport of amino acids into the cells for protein synthesis. It is well to begin with more dilute, less hypertonic solutions (that is, one third of the patient's daily parenteral intake as hypertonic solution). Usually after three to four days the insulin need will vanish because of the increased secretion of endogenous insulin. The hyperosmolar syndrome must be guard-

ed against. Osmotic diuresis secondary to high carbohydrate-containing urine should be considered. This will be discussed further in connection with monitoring. The danger of giving protein without glucose is that the amino acids will be used for energy, and the specific dynamic action of converting protein to calories instead of glucose requires a higher caloric expenditure.

Cannulation

Cannulation can be done by one of several methods. Anyone of the four jugular veins can be utilized. The catheter should be passed through the jugular vein into the superior vena cava. Any catheter placement should be monitored by x-ray to be sure that the appropriate placement in the superior vena cava has been achieved. It is good practice to use not more than three of the four jugular veins, to avoid cerebral edema or facial swelling secondary to venous insufficiency in cerebral drainage. In no instance should the catheter extend into the inferior vena cava because of the risk of renal vein thrombosis. Supraclavicular or subclavicular puncture may be utilized in place of the cutdown methods. If a neonate has a cutdown catheter in the jugular area, the tubing should be tunneled subcutaneously to the retro-auricular mastoid area or to the parietal area of the scalp and brought out where little hands cannot reach it and where it is away from nasal and oral secretions. Areas of cutaneous infection or open stomas should also be avoided.

The exact techniques of supraclavicular and subclavicular punctures are described elsewhere by Dudrick⁷ and James.⁵ Meticulous surgical care is utilized in placing the catheters. The skin is prepared with acetone or ether and then swabbed with iodine or Betadine. Gloves and sterile towels are utilized while the catheter is being inserted. A counter incision is employed in the cutdown technique. This leaves a greater distance from skin to vein and pre-

Table 7
Minimum Daily Needs Using Diet*

Protein	2 gm
Calories	60-70
Water	50-55 ml

* Calculate on patient's ideal weight for stature, height, and age

Table 8
Minimal Daily Vitamin and Electrolyte Needs*
(MEQ per kg per day)

Sodium	2.3
Potassium	1.3
Chloride	2.3
Calcium	0.31
Phosphorus	0.33
Magnesium	4.3

* Calculate on patient's ideal weight for stature, height and age

Table 9
Typical Composition of a Daily Average
Nutrient Solution for an Adult

Water	3200	Vitamin A	10,000
Protein (as amino acid)	120 gm	Vitamin D	500-1000 Units
Nitrogen	18 gm	Vitamin E	5.0 I.U.
Carbohydrate	700 gm	Vitamin C	500 mg
Calories	3200	Thiamine	50 mg
Sodium	135 meq	Riboflavin	10 mg
Potassium	100 meq	Pyridoxine	15 mg
Magnesium	6 meq	Niacin	100 mg
		Pantothenic Acid	25 mg

Calcium and phosphorous are added when needed

vents bacterial contamination of the blood stream by movements of the catheter. The site of exit of the catheter tubing at the skin level, whether the tube is silastic, silicone, Teflon or heparin-impregnated polyethylene, should be coated daily with triple antibiotic ointment. Every three days the entire bandage should be removed and the area completely surgically cleansed and dressed as it was on the initial insertion. A coil of catheter from the inserted tubing should be left in the bandage as a prevention against sudden tension on the intravenous line causing the catheter to be dislodged or moved.

Ideally the catheter should be maintained for 30 to 40 days; it should be removed if septicemia occurs and a positive blood culture is noted. The catheter tip may be contaminated by infections elsewhere as well as being a source of contamination.

Our routine is to observe the patient with fever which occurs in the first two weeks unless we get a positive blood culture; fever occurring after 15 days indicates that the catheter should be removed. If the catheter is the cause, no antibiotics are necessary and it should not be reinserted for 48 to 72 hours. To maintain sterility, blood should not be drawn from the catheter and medications should not be administered through it. This will keep the seal as airtight as possible. A patient may become febrile in the first four or five hours or the first week of feeding, secondary to allergy to the protein in the fibrin hydrolysate. The pH of the solution in the catheter is about 5.35, and the osmolarity ranges from between 1,400 and 2,200 milliosmoles using the hyperalimentation solution. Therefore, the major contaminants are *Candida albicans*, other fungi, and *Staphylococcus albus*. These organisms must be carefully guarded against and every catheter tip should be cultured when it is removed. Only meticulous attention to detail will make it possible to maintain the catheter in position. We have found it effective to place a Band Aid over the entrance of the catheter. This tape may be changed daily and antibiotic ointment applied.

The volume, frequency, and sugar content of the daily urine output should be monitored. Insulin should be given when the sugar content reaches 3

plus or greater in three serial specimens. A stat blood sugar should be obtained after the first two sugar reactions of 4 plus. Daily electrolytes and osmolarity of the urine and serum should be determined initially and eventually once or twice a week. Blood sugar levels are obtained frequently in the early stages of treatment, and later only occasionally. Other values that should be obtained weekly are hemoglobin, hematocrit, total serum protein, albumin, globulin, blood urea nitrogen, lactic dehydrogenase, serum glutamic oxaloacetic transaminase, alkaline phosphatase, creatinine and white blood cell counts. Sites of drainage other than urine, such as nasogastric or fistulous drainage, must be monitored for electrolyte content so that losses may also be replaced. Albumin in 12.5 to 25 gm increments may be added to the regimen in order to facilitate the reversal of hypoproteinemia. Daily weight records should be greatly emphasized as a helpful adjunct in following the patient's course.

Approximately 25 percent of adults will need insulin for the first three or four days of therapy, but no longer. This is not true of children, who seem to tolerate the glucose well except during the neonatal period when they can handle much less than the amount predicted. Up to 5,000 to 6,000 calories per day may be given in this fashion. The average adult intake of a liter of this solution is shown in Table 6. It is important to emphasize the need for a 0.22 micron millipore filter to remove bacteria and other particulate matter in the system. This is why motor driven pumps are probably better than the gravity method.

Clinical signs of improvement are increased activity, weight gain, wound healing, fistula tract closure, and the general feeling of increased well-being and strength.

COMPLICATIONS

Cardiovascular stability should be established prior to beginning these feedings, as the hyperosmolar solution may cause sudden shifts of fluids in the fluid spaces (See Table 2) and hypotension.

Three patients have been maintained on these regimens for more than 90 days, and routinely they can be continued longer than 40 days. The most common complication is catheter sepsis, which occurs in 18 to 23 percent of patients. This is why blood should not be withdrawn nor medications given in the infusate. This is also why the infusate should be cultured periodically to be sure that it is sterile. Fever itself, if blood cultures early in the course of catheter insertion are negative, does not indicate infection from the catheter. If fever continues more than seven days or occurs after 15 days of catheterization, it is wise to remove the catheter, culture the tip, and reinsert another catheter in two or three days. Hypopotassemia, because of the large stores of potassium utilized, is another danger which must be avoided. Demineralization of bone because of the

lack of calcium, electrolyte acid base imbalance, and protein changes is another important complication to be aware of. Avoidance of complications can be divided into three major categories: (1) placing, positioning, and maintaining the sterility of the catheter; (2) providing proper nutrients and maintaining the sterility of the fluids; and (3) obtaining metabolic balance during the infusion of highly hypertonic solutions.

In addition to sepsis other complications may occur: sensitization to the peptides, caval thrombosis, potassium depletion, bone demineralization, perforation of various vessels during catheterization, and cerebral edema. This is known as the "chipmunk syndrome." Other problems are occult nutritional deficiencies, hyperosmolar syndrome, and microemboli to the lungs. Occult nutritional deficiency will be particularly hard to detect, since many of the trace elements are difficult to analyze. Thrombosis of the catheter may be checked by injecting a small amount of hypertonic Renografin-60.

Safe long-term administration of fluid can then be carried out with a solution of 20 percent glucose, 5 percent fibrin hydrolysate through cutaneously placed catheters in the superior caval system. This can be done with relative safety if meticulous attention is paid to metabolic balance and details of the administration and mechanics of handling the system of delivery. There is a great potential for causing reversal of catabolic states. This regimen also provides a recovery period while the patient is recuperating from massive insult, either from loss of gastrointestinal continuity or increased metabolic needs. We feel that this is an effective and useful method that is not necessarily limited to medical centers.

SUMMARY

Hyperalimentation, developed to a high degree of usefulness by Dubrick and others⁷ in 1967-1968, has basically consisted of a solution of 20 percent dextrose and 5 percent protein hydrolysate administered to reverse catabolism to anabolism.

The two methods used are the elemental diet introduced into the intestinal tract, and the intravenous hypertonic solution providing calories and protein without fat, given in equal increments over a 24-hour period. Vitamins, trace elements, and fatty acids are all added by the frequent administration of fresh frozen plasma, and elements such as vitamin B₁₂ and iron dextran (Imferon) are restored parenterally.

Since a large high flow vein must be used to prevent thrombosis from this hyperosmolar solution (1,800 to 2,000 mOsm per liter), complications are primarily mechanical. The placement of the catheter *must be checked by x-ray* to be certain of correct position. Cannulation of the superior vena caval system is the only method recommended, because the inferior caval system not only thromboses more

rapidly, but also involves the risk of renal vein thrombosis. Sepsis in 18-23 percent of the patients is the most frequent complication. Usually it is fungal, and the solution's pH being acid discourages most bacterial growth. Strict adherence to good surgical techniques, asepsis, and frequent dressing change must be stressed. Hyperglycemia, the hyperosmolar syndrome, hypokalemia and other metabolic derangements, such as trace element deficiency are also encountered. It must be re-emphasized that the neonate handles glucose poorly, needs less protein, should have some fructose, and is totally different from the adult in management. It is good judgment to send such a child to a medical center where the personnel are available to monitor meticulously these infants' delicate metabolic balance. The tremendous burden of care would inundate any conscientious practitioner.

Several CVP methods are suggested for administration. Our preference is a supraclavicular or subclavicular puncture or a peripheral Brescia AV fistula as our second choice. One group of patients who are candidates for hyperalimentation are neonates with deficient gastrointestinal tracts secondary to anomalies of birth. The mortality of these neonates can be reduced if life support may prevent malnutrition until intestinal hypertrophy occurs. Other candidates for this therapy include the debilitated, chronically ill, chronically infected patients awaiting surgery and those with major malignancies. The postoperative course is smoother with this type of therapy. Patients who are anorexic from chemotherapy or irradiation, those with enteric fistulas, inflamed or functionless intestine, and those with chronic renal failure or hepatic failure are also good candidates.

Overall, the "wet method" mixture is simple, using a continuous flow pump with a 0.22 micron millipore filter and the regimen outlined in the text. This method appears to be of modest clinical value at present, and the future promises better and more specific solutions, techniques of administration, and broader scope of usage as well as better ways of monitoring the patients.

It must be stressed that hyperalimentation is now clinically applicable and should be learned and utilized by those treating hospitalized patients.

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Breast Reconstruction

Nicholas G. Georgiade, M.D.

MANY problems related to the breast, both female and male, are amenable to well established reconstructive surgical procedures.

The severe psychological problems associated with the removal of a woman's breast can be well understood, and now the ability of the surgeon to offer the patient a suitable alternative has merit. In the case of the woman who has a history of chronic fibrocystic disease of the breast, chronic mastitis, or multiple fibroadenomas, the technique of the subcutaneous mastectomy via a submammary incision, followed by insertion of one of the widely used silicone-gel implants is extremely satisfactory.¹⁻³ The use of this technique allows for removal of the patient's breast tissue but still preserves the outer skin envelope pertaining to the areola and nipples. Prior to this type of surgery mammograms are obtained.

TECHNIQUE

The technical aspects involve retraction of the gland via a submammary incision and dissection of the breast tissue from the pectoralis, serratus magnus, and external oblique muscles with dissection including the axillary area. After the glandular tissue has been carefully separated from the underlying musculature by means of sharp dissection it is resected from the dermal layer of the skin. At this time all mammary tissue should be removed including the axillary segment which extends well into the axilla, with care being taken to maintain a sufficient thickness in the area of the areolae.⁴⁻⁵ The mammary tissue removed is carefully labeled as to side and position. It is routinely sent to the pathologist for his careful evaluation. Any suggestive areas found at the time of the surgery are subjected to

frozen sections. Although cancers of the breasts are rarely found, this routine is adhered to.⁶⁻⁸

Following meticulous hemostasis, a silicone gel-filled prosthesis, usually slightly smaller than the actual breast tissue removed, is inserted. After a period of one to two weeks, the patient can usually

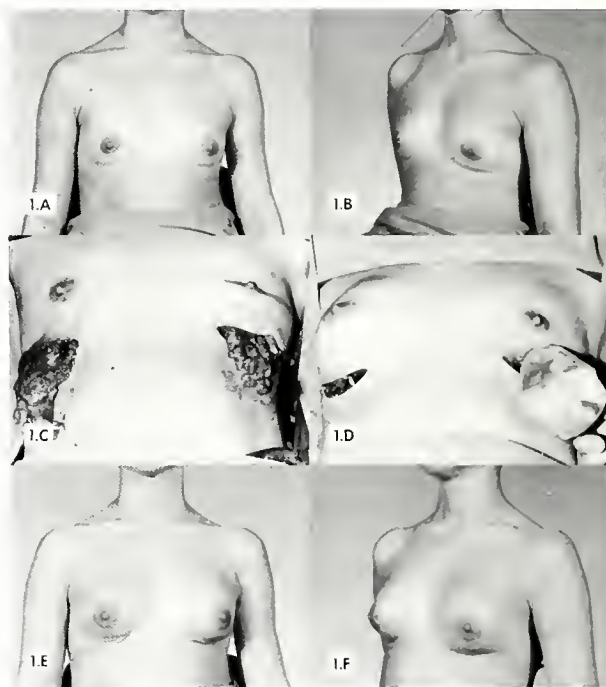


Fig. 1. A-B. Preoperative photographs of a 30-year-old woman with chronic cystic mastitis and extensive nodularity of the breast tissue. Note scars of previous biopsies. C. Breast tissue is being removed through a submammary incision. D. Silicone-gel prosthesis is being inserted through the same incision. E-F. Appearance of breasts six months after operation. Note camouflage of the submammary scar in the mammary fold which is now inconspicuous.

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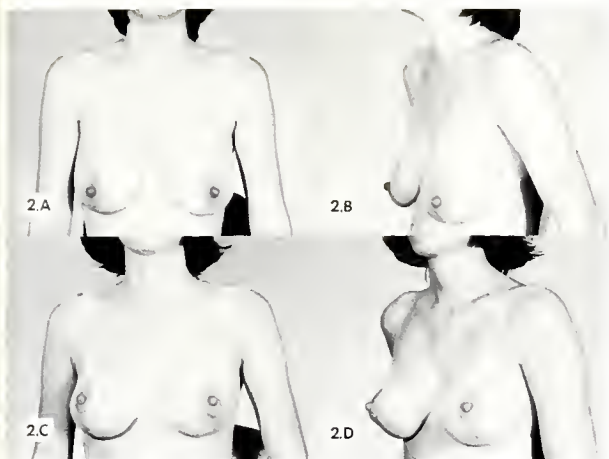


Fig. 2. A-B. Moderate mammary hypertrophy in a 24-year-old patient. C-D. Mammaplasty was reduced by a technique that maintains the integrity of the blood supply and ductal systems to the nipples for possible future lactation.

return to her normal activities, avoiding strenuous arm and shoulder exercise.

INDICATIONS

Breasts of excessive size and weight cause the woman considerable handicaps and discomfort. A number of procedures are presently utilized to reduce the bulk of the breasts and to recontour the remaining breast tissue into a more normal size and position.^{9,10}

Depending on the actual size of the hypertrophied breasts, the technique will vary as shown in Figures 2-4.

Mammary hypoplasia is now almost universally managed by inserting prostheses of varying sizes. These prostheses are identical with those utilized in the subcutaneous mastectomy techniques previously



Fig. 4. A-B. Massively enlarged and pendulous breasts caused severe physical impairment in this 60-year-old patient. C-D. Views at six-month periods following amputation of the breasts, reconstruction of the nipples as free grafts and recontouring of remaining breast tissue around the nipple grafts.

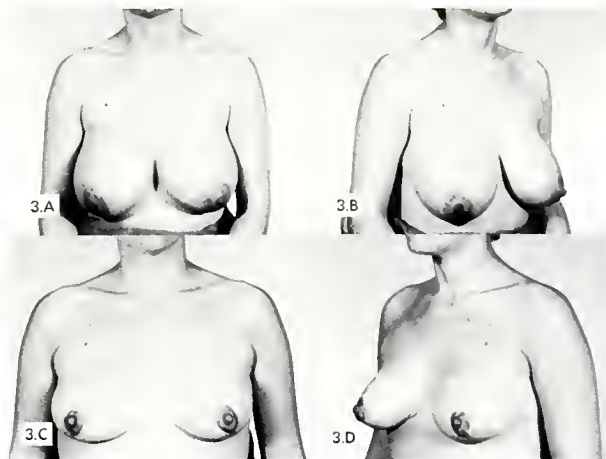


Fig. 3. A-B. More pronounced mammary hyperplasia causing the patient discomfort. C-D. Photographs taken three months after operation show adequate reduction obtained by use of the "Swedish" techniques involving transfer of the nipples on a bipedicle of breast tissue to a more natural position and redraping of the skin and breast tissue inferior to the newly positioned nipples.

noted. The size will depend on the degree of breast augmentation and profile alteration to be obtained. A soft, natural-appearing breast can be obtained with this procedure, which is usually performed with minimal discomfort to the patient¹¹⁻¹³ (Figs. 5 and 6).

Mammary hyperplasia in the adolescent male is satisfactorily corrected by means of a semicircular areola incision. The resultant scar is quite imperceptible. The removal of a psychological hazard in a young boy cannot be underestimated (Fig. 7). A routine endocrinological evaluation should be carried out prior to surgery.

Following trauma such as that occurring in third degree burns, the breasts can be reconstructed with the use of skin grafts. After the initial procedure, additional grafts are used to allow increased release of the breast tissue. The destroyed nipples and areolae

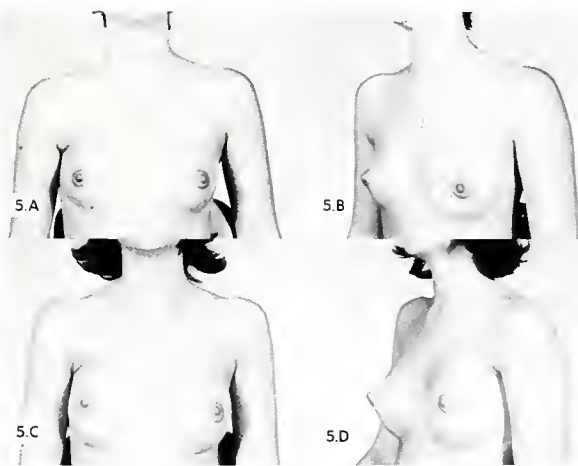


Fig. 5. A-B. Hypoplastic breasts of a young adult female. C-D. The same patient six months after insertion of silastic gel implants. Note fullness and natural contour of the breasts.

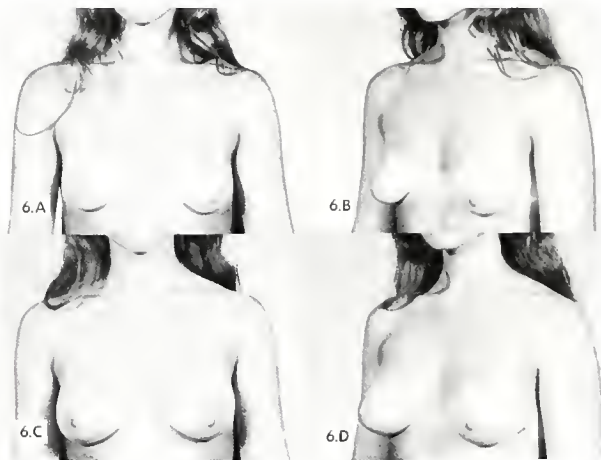


Fig. 6. A-B. Small, somewhat ptotic breasts in a young adult female. C-D. Views three months after operation show correction of the combined abnormalities. Silastic-gel prostheses of appropriate size and shape were inserted through a small submammary incision.

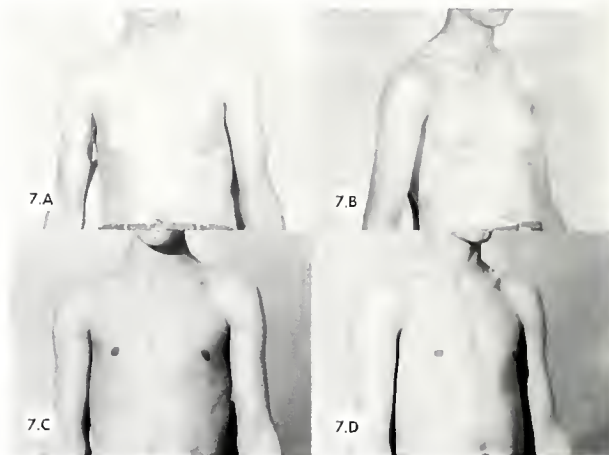


Fig. 7. A-B. Mammary hyperplasia (gynecomastia) in a 15-year-old boy. C-D. Bilateral reduction of mammaplasty was obtained via an aureola incision with excellent functional and aesthetic results. Photographs were made four months after operation.

SUMMARY

The author has described his experience over the past 19 years with the newer techniques of breast reconstruction. Specific note should be taken of the recent concept of the subcutaneous mastectomy and immediate prosthetic replacement.

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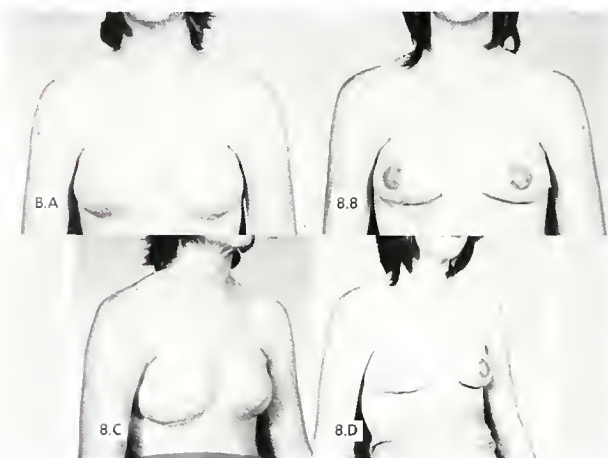


Fig. 8. A-B. Twelve years previously skin grafts had been applied to the chest of this 15-year-old girl following severe third degree burns. C-D. Appearance three months following release of scarred breast tissue and application of split thickness skin grafts. Simultaneous free grafts obtained from the labia majora were used to construct the nipples.

can be satisfactorily reconstructed by grafts obtained from the labia majora (Fig. 8).

Another thing which proves very hurtful to girls about [menarche] is unwholesome food. Fond of all manner of trash, they often indulge in it to excess. Hence ensue indigestions, want of appetite, and a numerous train of evils. If the fluids be not duly prepared, it is utterly impossible that the secretions should go properly on. Accordingly, such girls as lead an indolent life, and eat great quantities of trash, are not only subject to obstructions of the menses, but likewise to glandular obstructions; as the scrophula or king's evil, etc.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell. 1799, p. 356.*

Ten Years' Experience in Pediatric Group Practice

D. Russell Perry, Jr., M.D.

BY visiting other offices and listening to my colleagues discuss their office routines, I have gained much useful information. We like to think that our group practices quality pediatrics and that in a small way we contribute to the improvement of the delivery of pediatric care. Thus our group is grateful for the opportunity to share our experience, and we hope that some of the material will be of value.

The following discussion falls into two parts: (1) the initial problems and solutions; and (2) changes made in our practice during the past ten years.

INITIAL PROBLEMS AND SOLUTIONS

Our original group was composed of four general pediatricians representing a combined total of 30 years of private practice. Now there are five of us, with a combined total of 75 years of practice. Before joining forces, each of the original four doctors was in solo practice, but two of us had worked in the same office building, and two had worked together in the pediatrics department and private clinic of a medical school.

For one year before opening our group office we had numerous meetings, formulating in our minds what we really wanted (you might call this period our engagement). We had numerous details to iron out, and I am sure that had we had the money, Mr. Horace Cotton and his associates could have given us valuable information in our early planning stage, and saved us much time and energy.

During that year of preparation we looked for land on which to build, but decided instead to accept

the offer of a contractor to build, on his own land, to our specifications, an office for rent. The building exemplified the four-cornered concept, with a central laboratory and business area and four separate waiting rooms. Each doctor had four examining rooms and a consultation room.

We did then, and still do, attempt to maintain individual follow-up of patients, so that they can identify with one doctor while understanding that any member of the group might see them according to the call schedule, vacation, or time off.

We considered the provision of adequate parking space extremely important, since all of us had faced this problem at our previous offices.

While we worked out details about the building, other important details were being discussed and agreed upon: for example, what type of records to use. The end result of this matter was the terminal digit filing system with a letter-sized folder for each family. A family information sheet was designed to be filled out by each family when they entered the new office. Obviously this meant that at the time we opened the new office, each patient who came in had to have a number assigned, a family information sheet filled, a manila folder identified by name and number, and the old chart placed in its new folder. This was a monumental undertaking, and let me suggest that you do not move in January, February, March or April, or during an epidemic of measles: in other words, avoid moving.

OFFICE POLICIES

Bookkeeping: From the beginning of our practice together we have used the system that was suggested

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by our C.P.A., and we find it completely satisfactory. We use a National Cash Register bookkeeping machine, and as the patient leaves the office, the mother is given a charge slip and a self-addressed return envelope. No bills are sent from our office, only reminders of accounts past due. In our office of five pediatricians, we send only 400 to 550 reminders a month. A recent check of our payments revealed that 78 percent of the charges are collected without any billing except that given when the patients leave the office. Our collection rate during the past ten years has been 98 percent. Our cost for collecting ten dollars is 50 cents.

Personnel: This was and still is our most trying problem. After ten years in an office with more than three employees, I am thoroughly convinced that a course in office and personnel management should be required in medical school. Discussions on this subject were and still are endless, but we do feel that we have improved with experience. Through the years we have listed job specifications which have been of tremendous value in hiring new personnel and in pointing out job inadequacies. We have purchased a Standard Operating Procedure Manual from *Medical Economics* and have filed our office policies pertaining to vacations, sick leave, time off, holidays, and the like. This, too, has been a tremendous help. At the outset our personnel consisted of a business manager, a receptionist, a laboratory technician, and four office nurses. Except for some part-time help, the number has remained the same, though we changed some specifications when we moved six months ago.

Laboratory: This department was set up for only limited work, namely, complete blood counts, urinalysis, sedimentation rates, smears, and throat cultures.

Fees: This posed something of a problem, because the four doctors varied in their charges for different services, and it was necessary to reach an equitable agreement. We solved the problem to each man's satisfaction and made a list of standard charges. We try to keep our fees in line with prevailing charges in our area, but with continuing inflation we find it harder and harder to stay at a reasonable level. If financial reward is to be an incentive for choosing pediatrics as a specialty, a great change has to be forthcoming. This subject is obviously highly charged, but I am sure it is one of the reasons that few young doctors are turning to pediatrics.

Partnership agreement: Our original agreement was simple and lacking in detail. We had no trouble until the time came to put it to use, and then, because of the lack of specific detail, individual problems had to be negotiated and interpreted. This is not to imply that we had any hard feelings, but only to point out that we wasted time trying to make things equitable.

Originally our group was a four-man, equal-sharing partnership. When one of the original partners decided to leave pediatric practice and we were negotiating with another prospective partner, we spent considerable time with a new lawyer trying to compose another agreement. We believe that this negotiation was conducive to settling our more complex problems, but like all agreements, we will never know until we have to use it. (The marriage vows would probably work as well as anything we could create.)

Appointments: All doctors were listed every day with 15-minute appointments from 5:00 A.M. to 5:00 P.M. This required a very large sheet of paper which was hard to handle and could be used by only one person at a time.

INNOVATIONS

Once we began functioning as a group, it was several years before we felt any stimulus to try something new, but since one must progress, we began to make innovations. If you are overconservative and believe the list of 181 reasons "Why It Won't Work,"¹ published in a recent issue of *Medical Group News*, then you really will become stagnant. This we did not want to do. During the last four years we have made some changes—some challenging and interesting, others minor but important, we think, to our overall patient care.

Our most notable project has been the development of an automated pediatric counseling service via tape cassettes. This service involves the use of pre-recorded messages for routine office visits, and a telephone tape service using the message director system. If we can believe what the parents of our patients tell us, this service has been a tremendous consolation to them. In the month of March, 1971, the telephone tape service was called upon 300 times after office hours, and a total of 900 times during the entire month. Associated with the tape system, we developed an audiovisual program on the care of newborn infants, demonstrating to the mothers the preparation of formulas, how to bathe the baby, and a 12-minute discussion on general newborn care.

Probably the most beneficial innovation we have conceived during the past two years is the employment of a nurse assistant to help with our instructions concerning newborns and to visit primiparous mothers 10 to 14 days after they leave the hospital. We have been well pleased with this phase of our practice and highly recommend it. Our nurse seems to relate well to the mothers and to relieve many of their anxieties. Telephone calls during the mother's first month at home with the baby have virtually ceased.

We have also introduced a "nurse only" visit in our office procedure for mothers with second and third infants. Instead of being seen by the doctor every month, the infant is seen by the nurse at two, four,

and nine months for measurements, immunizations, tape counseling, and questions. Of course these visits are more economical for the family besides saving time for the doctor.

In the past several years we have conducted some research for Squibb Laboratories pertaining to streptococcal disease and monilial infections.

In October of 1970 we moved into a new office and changed our whole method of seeing patients. The concept of this office is similar to that described by Dr. Olin Shivers.² We have made some additions that we think have been beneficial. Because there is no common waiting room, cross infection is prevented.

During the past four months we have introduced a continuing pediatric history form and a diagnostic coding system. This is our latest and most needed project. As we all know, history recording forms certainly need standardizing: data derived from well-baby visits as well as sick baby visits are kept atrociously in most offices. Our main goal here is to make the transcripts of records sent from one doctor to another uniform in style and easy to interpret. We have found our new forms to be quite satisfactory and efficient.

Records: We have changed our system of record keeping to color coding and terminal digit filing. We borrowed an idea from Blair Bryan's group in Charlotte, and now give each mother her child's chart number on a small adhesive sticker for mounting on the telephone, and request that she give this number when calling the office. Since even our phone calls are recorded on the child's records, this procedure facilitates the pulling of records.

Telephones: In the new office we use push button dialing and find it speedier than the old method. We have four incoming and outgoing lines and two unlisted numbers for returning calls. The number of incoming lines is insufficient during rush hours, but we have no desire to install a switchboard and add

personnel. The phones are located at prime places throughout the office. Each doctor carries an electronic pocket page for urgent calls. This device may summon him within the office to the phone or inform him that a patient is ready to be seen.

We have individual appointment books printed to show 20 minute blocks, age of child, and his chart and telephone numbers.

SUMMARY AND CONCLUSION

Presented briefly are some of the problems that confront doctors in group practice. There are always opportunities for change and continual improvement. Matters that we hope to delve into during the coming years are (1) continuing education for group practitioners and office personnel, and (2) simplified methods of developmental testing. We think our most immediate and urgent concern is the matter of standardizing records. Though it may be impossible to devise a coding system or history form to please everyone, it must be agreed that some type of standardization of office records is urgently needed.

The new president of the Academy of Pediatrics, Dr. Russell Mapes, presented our challenge for the seventies when he said, "The delivery of health care to all children both in quantity and quality will be the major challenge we will face during the coming years."³

Practicing, nonacademic pediatricians have a major responsibility and opportunity in the entire area of *delivery* of health care to children. We can perhaps best repay our communities for the privilege of practicing pediatrics by our work in the area of ambulatory pediatrics, where we are the only experts available.

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Females generally begin to menstruate about the age of fifteen, and leave it off about fifty, which renders these two periods the most critical of their lives. About the first appearance of this discharge, the constitution undergoes a very considerable change, generally indeed for the better, though sometimes for the worse. The greatest care is now necessary, as the future health and happiness of the female depends in a great measure upon her conduct at this period.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc.*, Richard Folwell, 1799, p. 356.

After Hours Pediatric Practice

Charles I. Lahser, M.D.

THIS paper describes a method which pediatricians in Gastonia, North Carolina have been using for providing after hours pediatric care. This is based upon a more efficient use of time in an adequate environment with the professional support of a registered nurse and the clerical support of a secretary. This plan was adopted and better care is rendered by one pediatrician than was previously rendered by two.

Fifteen years ago and earlier, pediatrics was a specialty which presented much the same variety of demands as it does now: nursery care, inpatient care, emergency room care, well baby care, sick child care, child guidance, participation in a variety of meetings and organizations, general hand-holding, and the ever-growing list of telephone calls. One house call consumed approximately 45 minutes, if you were lucky. Frequently, clinical evaluation was done in the poorest of environments, and therefore the quality of care suffered.

As a result of this pressure, two solutions developed: partnership practice became the rule instead of the exception; and, since there was virtually no time left for making house calls, they were abandoned. To me, this was in a way a loss, for both solutions began a progressive trend toward less personal contact and rapport with our patients. The after hours care, however, remained approximately the same, and with a group the pediatrician on call found himself with a greater burden and a frustrating system. After hours care seemed to evolve into a mixture of late office hours, late and laborious hospital rounds, irritating and resentful emergency room practice, and a constant stiff arm technique on the telephone throughout the night.

PROCEDURES

In Gastonia and its surrounding satellite towns, which includes a population of approximately 80,000, there is one group of three pediatricians, of which I am a member, and another partnership of two pediatricians.

In February of 1969 the idea occurred that if the night coverage for the two groups could be combined with the use of the office, a nurse, and a secretary, four patients per hour could be seen between 7 p.m. and 10 p.m. This would enable one pediatrician to see a possible total of 12 patients per night, which exceeded the number previously seen by two pediatricians. The use of the office, a nurse, and a secretary provided all the pediatrician's usual tools for the delivery of a higher quality of care, and to more patients. The secretary removed the pediatrician from the constant burden of the telephone, and also removed the patient from the negative attitude of the pediatrician. The patients were invited to be seen, instead of being resisted and put off. The administrative tasks of bookkeeping and record filing were also removed from the pediatrician, thus increasing the efficiency for the care of the patient. The clinical assistance of a nurse obviously increased the quality of clinical care with the availability of laboratory procedures and the administration of injections and other patient needs. Assistance by the nurse in her preparation and reassurance and to the child also increased the pediatrician's efficiency. By more adequately caring for the requests of patients in the early night, we had few calls after midnight.

Several factors present in our area seem to have helped make this system effective. First, there was a good working relationship between the pediatric group and the pediatric partnership. Each individual pediatrician seemed to have respect for the others. Second, the emergency room of the local hospital

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From the Children's Clinic, Gastonia.
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was staffed by physicians who absorbed the unestablished emergency room "drop-ins." Third, the five pediatricians involved constituted all the pediatricians available in the community and its satellites. Fourth, all patients were referred back to their own pediatric group for follow-up, and a copy of the clinical record was mailed to their pediatrician. Fifth, our community had an established telephone answering service. All calls between 5 p.m. and 7:30 a.m., therefore, were directed to the pediatrician on call or to his secretary in the office.

The only objection to the system was that it further reduced personal identity and rapport between the patient and his pediatrician. This objection was soon absorbed in deference to the increased availability and quality of care.

We began the new system on a trial basis in March, 1969. At that time we decided to utilize it only on Sundays until the fall of 1969, to determine whether or not it would be accepted by the patients. On the first day—Sunday, March 9, 1969—a total of 34 patients were seen, 19 for the group, 13 for the partnership, and 2 for the first time. Twenty-four patients were seen between 1 p.m. and 6 p.m., and ten patients between 7 p.m. and 9 p.m. The period of call extended from 7:30 a.m. Sunday to 7:30 a.m. Monday.

After a six months' trial period, it was established that week-day office hours could end at 5 p.m. This was indeed a revolutionary change for our office. During the week the pediatrician on call accepted responsibility for all calls originating for both groups between 5 p.m. and 7:30 a.m. the following morning, and from 7:30 a.m. Sunday until 7:30 a.m. Monday. It was agreed that telephone requests for appointments that originated before 5 p.m. and could not be filled would be referred to the office of the pediatrician on call to be filled that night. Each office was obligated to make hospital rounds and nursery check on the patients of their respective groups. Between 5 p.m. and 7:30 a.m. the pediatrician on call responded to inpatient hospital calls.

A letter was mailed, with the statements, to the patients of our group to inform them of this new system of after hours care, tell how it worked, and explain its advantages.

A back-up system was established whereby the pediatrician on call could, in the event of a consuming emergency, call upon a pediatrician of the opposite group either to take over the emergency or to see patients in the office. For hospital or follow-up visits, the patients were instructed to return to their respective group pediatricians. Fees for services were to be made by the pediatrician on call and were to be charged and collected by his group independently. It was expected that services and care would be at the discretion of the pediatrician on call without respect to the patient's particular group. It was recognized that some patient switching would occur,

and an effort has been made to see that each patient return to his respective pediatrician. A schedule of call and back-up was established.

In the beginning, when the pediatrician on call saw a patient from the other group, the record was typed on a plain 8- by 11-inch sheet of paper and a copy was sent to the other group. Later a printed form with a no-carbon-required copy was developed. These records were either mailed at the end of office hours that night or were left in the nursery to be picked up the following morning.

Results

This system of after hours care has been in effect continuously for 20 months and has received positive acceptance by the patrons of both groups. It now seems to be automatically accepted, and little resistance has been expressed to the pediatricians directly or indirectly. Many parents have voluntarily expressed their approval, saying that they like the new system because services are more easily obtained, the attitude of care has improved, and the child receives more thorough care in the office. There has certainly been no objections from the pediatricians regarding the shorter hours and additional free time.

The total number of patients cared for by our group has actually increased, in spite of curtailing our daytime appointments at 5 p.m. The after hours patients seen has also increased. ("Total Monthly Patient Census").

Although we have not eliminated the need to work at night and the need to live with the telephone, we do believe that we have made the load easier, with more time off, and have made after hours care more available, with a better attitude on the part of physicians and improvement in the quality of care given.

Total Monthly Patient Census P/L/A

	1968	1969	1970	1971
January	1821	2523	2304	2421
February	2075	2069	2282	2492
March	2143	2445	2420	2715
April	2215	2167	2379	
May	2121	2011	2358	
June	2028	2044	2198	
July	2166	2059	2405	
August	2268	2197	2379	
September	2202	2185	2322	
October	2164	2620	2524	
November	2183	2180	2272	
December	2150	2304	2468	
TOTALS	25,536	26,804	28,311	(7,628)

Sample Monthly Totals of Patients Seen Night and Sunday By P/L/A

	1969	1970	1971
January		239	311
July	30	253	
December	182	220	

Editorials

THE MAY EXECUTIVE COMMITTEE MEETING

For the first time, the Executive Committee met two weeks in advance of the annual meeting, rather than immediately prior to the first meeting of the House of Delegates. The change took place because the volume of material with which the Society must concern itself is now so large that the headquarters staff could not reasonably get everything ready for the House of Delegates with so little time from one meeting to the next. Accordingly the group gathered for the first time in the new headquarters building, which has a room admirably suited for the purpose, working from 9. A.M. until 6 P.M. on various matters which will be reflected in the actions of the House of Delegates, to be covered in a later editorial. A few items will be noted here, since they may not receive attention in the House.

At present North Carolina is the only state in which the medical society coordinates emergency medical care. By federal direction, we will now join the other 49 states in having the State Board of Health as the coordinating agency. Dr. George Paschal recommended this change, and Dr. Koomen said that the State Board is willing to accept the responsibility.

Continued ferment with regard to health workers operating as physician's assistants was evident. Semantics plays an important role at present, with no one being quite sure what to call nurses who take on more than the usual nursing responsibility in patient care, or the graduates of the Duke and Bowman Gray programs. The Society had voiced objections in the past to the term "physician's associates," since the same term describes the relationship between two or more physicians who practice together, yet there is a national organization of what we call physician's assistants who call themselves physician's associates. There was agreement that it is necessary to keep working on these problems and to keep lines of communication open as new patterns of practice evolve.

The Blue plans are considering a program for state employees which would not be the usual indemnity type of plan, but would pay the usual and customary fee, with the physician committee to accept that as payment in full. The sense of the Council was that this interpretation by the Blue plan of

physician attitudes toward usual and customary fees was not proper, and this will be brought to them immediately.

The Army is interested in bringing North Carolina into its MAST program, the acronym standing for Military Assistance to Safety and Traffic. Helicopters from Fort Bragg would operate up to 100 miles from that base, initially in transporting stabilized patients and urgently needed medical supplies from one point to another within that radius. In the next phase crews would work with trained ground personnel in transporting patients from the scene of accidents to medical facilities. The activities of the men would be considered part of their continuing training, and would not be charged to the patients. Dr. George Watson and his committee are working with Army personnel on this plan.

WHY EARLIER MENARCHE?

Our supplier of fillers, Dr. William Buchan (1729-1805), though dead these 167 years, supplied the impetus for this editorial, as follows:

"Females generally begin to menstruate about the age of fifteen, and leave it off about fifty, which renders these two periods the most critical of their lives. About the first appearance of this discharge, the constitution undergoes a very considerable change, generally indeed for the better, though sometimes for the worse. The greatest care is now necessary, as the future health and happiness of the female depends in a great measure upon her conduct at this period."

Many observations have been made suggesting that in contemporary western countries the menarche occurs two years or so earlier than in Buchan's day, though we have no evidence of how sound his statistics were; they do agree with other observers of the times. As Jafarey and colleagues¹ observe, where once medical writers observed that the girls of tropical countries began to menstruate earlier than those of Europe, the reverse is now true. This group suggests that exposure to artificial light may explain the difference, the effect of the light being mediated by the pineal gland; such mediation is demonstrable in rats. Shortly after their letter appeared in the *Lancet*,

Skutsch² replied, confirming their observations but doubting their invocation of the pineal on the grounds that blind girls have an earlier menarche than those with sight. This difference extends even to girls with total, or near total, loss of vision, as compared with those who see shadows or have enough sight to guide themselves.³

Is it possible that whatever mediates a possible light-menarche interaction does not depend on the eye as a receptor? Or is the correlation with artificial lighting invalid? There is only circumstantial evidence on the matter at this time. An earlier idea that improved nutrition brought earlier menarche does not seem to hold true. Better nutrition does seem related to increased body size, but in areas

with better nutrition but little increased light exposure the menarche is not earlier. No one has yet related it to all the other stimulants of the day—cola drinks, loud music, and other things any parent of teenagers can think of. There should be enough here to keep a goodly number of researchers busy, and rats dying, for some time to come. Perhaps the makers of menstrual protective devices—who would then encourage the use of menarche stimulants—are the logical ones to look to for grant money.

References

1. Jafarey NA, Khan MY, Jafarey SN: Role of artificial lighting in decreasing the age of menarche. *Lancet* 2:471, 1970.
2. Skutsch G: Role of artificial lighting in decreasing the age of menarche. *Lancet* 2:571, 1970.
3. Magee K, Basinska J, Quarrington B, Stancer HJ: Blindness and menarche. *Life Sci* [1] 9:7-12, 1970.

Committees and Organizations

NORTH CAROLINA STATE BOARD OF HEALTH

"When Abortion Not Unlawful"

N. C. General Statute, Section 14-45.1

Following is General Statute 14-45.1 as amended by the 1971 General Assembly. This section defines the conditions of lawful abortion and specifies the method of reporting (see last paragraph). For abortions performed after March 15, 1972, only the SBH-1449 form is acceptable.

* * *

"When Abortion Not Unlawful." N. C. General Statute, Section 14-45.1

Notwithstanding any of the provisions of G.S. 14-44 and 14-45, it shall not be unlawful to advise, procure, or cause the miscarriage of a pregnant woman or an abortion when the same is performed by a doctor of medicine licensed to practice medicine in North Carolina, if he can reasonably establish that:

There is substantial risk that continuance of the pregnancy would threaten the life or gravely impair the health of the said woman, or

There is substantial risk that the child would be born with grave physical or mental defect, or

The pregnancy resulted from rape or incest and the said alleged rape was reported to a law-enforcement agency or court official within seven days after the alleged rape, and

Only after the said woman has given her written consent for said abortion to be performed, and if the said woman shall be a minor or incompetent as adjudicated by any court of competent jurisdiction

then only after permission is given in writing by the parents, or if married, her husband, guardian or person or persons standing in loco parentis to said minor or incompetent, and

Only when the said woman shall have resided in the State of North Carolina for a period of at least 30 days immediately preceding the operation being performed except in the case of emergency where the life of the said woman is in danger, and

Only if the abortion is performed in a hospital licensed by the North Carolina Medical Care Commission, and

Only after two doctors of medicine shall have examined said woman and certified in writing the circumstances which they believe to justify the abortion, and

Only when such certificate shall have been submitted before the abortion to the hospital where it is to be performed; provided, however, that where an emergency exists, and the certificate so states, such certificate may be submitted within twenty-four hours after the abortion.

All abortions performed under the provision of this section shall be reported to the State Board of Health within five (5) days of the date of operation. The report shall be for statistical purposes only and the confidentiality of the patient relationship shall be protected. The report shall be submitted on a form provided by the State Board of Health. The administrator of the hospital in which an abortion is performed shall be responsible for insuring that a report is submitted in accordance with this paragraph. The requirements of G.S. 130-43 are waived for abortions as provided in this section.

Bulletin Board

WHAT? WHEN? WHERE?

In Continuing Education June, 1972

I. Current Events in North Carolina June 15-16

Institute on Multi-Media Instruction for Nursing Education
Place: Carrington Hall, UNC, Chapel Hill
Sponsored by: UNC School of Nursing Continuing Education Program and Learning Resources Committee
For Information: Dr. Susanna Chase, Director of Continuing Education, UNC School of Nursing, Chapel Hill 27514

June 15-17

"Mountaintop Medical Assembly"
Place: Waynesville
For Information: Jack Dickerson, M.D., Waynesville Surgical Associates, P.A., 1600 North Main Street, Waynesville, 28736

June 20

Conference on Teaching Human Sexuality and Family Planning in Nursing Education
Place: University of North Carolina, School of Nursing
For Information: Dr. Susanna L. Chase, Director of Continuing Education, UNC School of Nursing, Chapel Hill, 27514

June 23

American Academy of Family Physicians Conference, "Just What the Doctor Ordered"
Place: The Carolina, Pinehurst
Sponsored by N. C. Academy of Family Physicians and School of Pharmacy, UNC
Open to: Family physicians and pharmacists
Registration Fee: \$15
For Information: School of Pharmacy, UNC, Chapel Hill, 27514

July 2-4

Second Annual Symposium on Sports Medicine
Place: Blockade Runner, Wrightsville Beach
Dinner Speaker Monday, July 3, 8:30 p.m. Mr. Homer Rice, Director of Athletics, UNC
Sponsor: The Committee on the Medical Aspects of Sports, Medical Society of the State of North Carolina
For Information: Frank C. Wilson, M.D., Chairman, Committee on the Medical Aspects of Sports, N. C. Memorial Hospital, Chapel Hill, 27514

July 23-28

Southern Obstetric and Gynecologic Seminar, Inc.
Place: Grove Park Inn, Asheville
Registration Fee: \$50
For Information: Dr. George T. Schneider, Ochsner Clinic 1514 Jefferson Highway, New Orleans, La. 70121

Aug. 16-18

Clinical Decision in Cardiology—3 Days in Cardiology
Place: Holiday Inn, Myrtle Beach
Sponsors: American Heart Association, Council on Clinical Cardiology; Duke University Medical Center; N. C. Heart Association
Fee: \$60, Fellows & members; \$100 non-members of Council on Clinical Cardiology
For Information: American Heart Association, Council on Clinical Cardiology, 44 E. 23rd Street, New York 10010

Sept. 14-15

17th Annual Angus M. McBryde Newborn Symposium
Place: Duke University Medical Center, Durham
For Information: Dr. George W. Brumley, Division of Perinatal Medicine, Box 2911, Duke University Medical Center, Durham 27710

Sept. 15-16

1972 Walter L. Thomas Symposium on Gynecological Malignancy and Surgery
"Why Cancer Treatment Fails and Its Subsequent Management, Hormonal Aspects of Endometrial Cancer and Urinary Incontinence Problems"
Place: Duke University Medical Center, Durham
Open to: Practitioners and residents in Obstetrics and Gynecology
Sponsored by: Department of Obstetrics and Gynecology, Duke University Medical Center
For Information: William T. Creasman, M.D., Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, 27710

Sept. 27-Oct. 1 (Note correction from May listing)

State Medical Society Committee Conclave
Place: Mid Pines Club, Southern Pines
For Information: Mr. William N. Hilliard, Executive Director, Post Office Box 27167, Raleigh, 27611

II. Coming Events in North Carolina Oct. 16-17

Joint Meeting of N.C.-S.C. Societies of Ophthalmology and Otolaryngology
Place: Blockade Runner Motor Hotel, Wrightsville Beach
For Information: Banks Anderson, Jr., M.D., N. C. Society of Ophthalmology and Otolaryngology, Duke University Medical Center, Durham, 27710

III. Out of State (through September, 1972) Sept. 18-20

American Academy of Orthopaedic Surgeons Course "Orthopaedic Nursing"
Place: Atlanta, Georgia
For Information: Joseph H. Dimon, III, M.D., 1938 Peachtree Road, N.W., Atlanta, Georgia, 30309
Send information for listing to WHAT, WHEN, WHERE, Box 8248, Durham, North Carolina, 27704. To be listed in a specific issue, information must be received by the 10th of the preceding month. Issues are scheduled for appearance on the 15th of each month.

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This advertisement appeared in North Carolina newspapers.

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Carolyn Elizabeth Culbreth Barker, MD, P, John Umstead Hospital, Butner 27509
Edward Harry Bishop, MD, ObG, UNC Department of Obstetrics and Gynecology, Chapel Hill 27514
Jerry Lee Danford, MD, ObG, 1830 Hillandale Road, Durham 27705
Christopher Columbus Fordham, III, MD, I, UNC Dean's Office, Chapel Hill 27514
Myron Arthur Goodman, MD, I, 713 Barker Street, Salisbury 28144
James Alan Gray, MD, U, 5303 Wrightsville Ave., Wilmington 28401
Anthony George Gristina, MD, Or, 2794 Acorn Court, Winston-Salem 27103
Joe William Hardison, MD, ObG, 514 Owen Dr., Fayetteville 28304
Henry Izurieta, MD, I, 907 Hay Street, Fayetteville 28305
Walter Lee King, MD, Oph, Route 6, Box 954, Hickory 28601
Harry H. McLean, MD (Former Member), Rt. 1, Box 538-1, Winterville
Khye Weng Ng, MD, N, Duke Medical Center, Box 2905, Durham 27710
Lorcan Aloysius O'Tuama, MD, N, UNC Department of Neurology, Chapel Hill
Samuel Morse Putnam, MD, I, UNC, Department of Internal Medicine, Chapel Hill 27514
Arvin Edward Robinson, MD, R, Department of Radiology, Duke Medical Center, Durham 27710
Norman Marshall Sawyer, MD, Oph, 2024 Randolph Road, Charlotte 28207
Joanne Antionette Peebles Wilson (Student Member), 1204 W. Markham Ave., Durham 27701
Walter George Wolfe, MD, S, Duke Medical Center, Box 3507, Durham 27710

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

Dr. Kenneth M. Brinkhous of the UNC School of Medicine here has been elected to membership in the National Academy of Sciences. An Alumni Distinguished Professor and chairman of the Department of Pathology, Dr. Brinkhous was one of 75 scientists elected this year into the prestigious organization.

Dr. Brinkhous has won international acclaim for his research in clinical pathology and hemophilia and was awarded an honorary doctor of science degree by the University of Chicago in 1967 for his outstanding contributions to the understanding of hemophilia.

* * *

Dr. William W. McLendon, a Greensboro pathologist, was installed as president of the UNC Medical Alumni Association during alumni day activities held here April 26.

Selected as president-elect was Rocky Mount internist Dr. Lewis S. Thorp, Jr.

* * *

Dr. Joseph A. Buckwalter, professor and director

Gantrisin® (sulfisoxazole) Roche® provides your patients with many important advantages:

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- rapid absorption
- rapid renal clearance
- high plasma concentrations
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully coordinated with bacteriologic and clinical response. When the patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture media.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in pregnancy has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias: Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. **Allergic reactions:** Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. **Gastrointestinal reactions:** Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. **C.N.S. reactions:** Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. **Miscellaneous reactions:** Drug fever, chills, toxic necrosis with oliguria and anuria. Periarthritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarities to some diuretics, diuretics and oral hypoglycemic agents. Gout production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

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Gantrisin's rapid excretion rate is another reason why it is generally well tolerated. Over 50% of a single oral dose is excreted in 8 hours, over 90% in 24 to 48 hours, so there is little risk of hematuria or crystalluria, and anuria is rare.

As with all sulfonamides, adequate fluid intake must be maintained. Complete blood counts and urinalyses, with careful microscopic examination, should be performed frequently.

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Usual adult dosage:

4 to 8 tablets stat
2 to 4 tablets q.i.d.



of the Central Neuro-Medical Surgical Service at Dorothea Dix Hospital, Raleigh, discussed "Selection of Treatment for Thyroid Carcinoma" at American Surgical Association April 26-30.

Written in collaboration with Dr. Colin G. Thomas, chairman of the UNC Department of Surgery, the paper is a study of surgical treatment in 397 patients with thyroid carcinomas seen at N. C. Memorial Hospital and the University of Iowa Hospitals during the past 35 years.

* * *

Dr. Benson R. Wilcox, professor and chief of the Division of Cardiothoracic Surgery, presented a paper on "The Effect of Septal Defect Closure on the External Work of the Heart" at the American Surgical Association meeting April 26-30.

* * *

Dr. Walter E. Stumpf, associate professor of anatomy and pharmacology, was featured at the 8th annual symposium on neural mechanisms in endocrine regulation held at Duke University April 25. He discussed "Steroid Hormone Target Neurons in the Brain: Sites for Hormonal Regulation of Endocrine Feedback and Behavior."

* * *

Dr. Colin G. Thomas, professor and chairman, Department of Surgery, has been named the Visiting Professor of Surgery at Madigan General Hospital in Tacoma, Wash.

As visiting professor on April 24-25, Dr. Thomas presented lectures on "Surgery of Congenital Malformations in Infancy and Early Childhood," "The Biology of Thyroid Cancer and Its Clinical Indications," and "Management of Parathyroid Disease."

* * *

Dr. Morris Schaefer, professor of health administration, recently completed a month-long round-the-world lecture and consultation trip. He first went to Los Angeles as a panelist at the AMA Conference on Human Development.

From there he went to Bangkok for two weeks as consultant to the Southeast Asia Region Office of the World Health Organization. His next stop was expected to be New Delhi and possibly Indonesia and Tehran on other WHO assignments. On May 21 he was to arrive in Geneva, Switzerland, to begin intensive work on a textbook on the administrative process in health, which WHO commissioned him to write. During the last three weeks of his stay in Geneva he expected to serve as a member and rapporteur of the WHO scientific group on Evaluation of the Environmental Health Program.

* * *

Four North Carolinians, a New Jersey UNC Alumnus, and two organizations received Distinguished Service Awards April 26 from the UNC School of Medicine.

Oscar Ross Ewing of Chapel Hill, Dr. Clement

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A private hospital for diagnosis and treatment of psychiatric and neurological disorders. Hospital and out-patient services.

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Rosenburg Monroc of Pinehurst, Dr. Richard Beverly Raney of Chapel Hill, Dr. Max Mordecai Novich, of New Jersey, Thomas Jackson White of Kinston, the North Carolina Association for the Blind, and the North Carolina Memorial Hospital Auxiliary were honored at the annual medical alumni dinner.

The Distinguished Service Awards were started in 1955 on the 75th anniversary of the founding of the UNC Medical School to recognize those who contributed importantly to the establishment and early growth of the four-year medical school.

The awards are designed to honor alumni and friends whose distinguished careers and unselfish contributions to society have added luster and prestige to the University and its Medical School.

* * *

The School of Medicine inaugurated a new visiting professorship the first of May in honor of R. Beverly Raney, M.D., chairman emeritus of orthopaedic surgery. Dr. Charles S. Neer, II, clinical professor of orthopaedic surgery at New York Orthopaedic Hospital, Columbia Presbyterian Medical Center in New York City, was the First Raney Visiting Professor May 2-3.

The professorship was established by former residents and faculty in honor of Dr. Raney who was chairman of the Division of Orthopaedic Surgery from 1952-1967. He is currently a clinical professor. It will enable a distinguished orthopaedic edu-

cator to visit the UNC Division of Orthopaedic Surgery each year for lectures and conferences.

* * *

A team of orthopaedic researchers at the UNC School of Medicine recently received the Nicolas Andry Award for orthopaedic research.

Presented annually by the Association of Bone and Joint Surgeons in recognition of original and stimulating research in the musculoskeletal field, the award was made to Dr. Frank C. Wilson, chairman, Dr. William H. Bowers, resident, and Walter B. Greene, fourth year medical student.

A paper on the work "Antibiotic Prophylaxis in Experimental Bone Infections" will be presented in June at the annual meeting of the Association of Bone and Joint Surgeons.

* * *

Three UNC medical students have received awards and fellowships.

Warner Hudson, first year, was selected as a Robert Hodges and John Canham 1972 Goldberger Student Fellow in Clinical Nutrition by the American Medical Association. The fellowship worth \$1,250 will allow Hudson to do research this summer in Iran on the effects of Phytate on nutrition and dwarfism.

John E. Graham, second year, won third prize, Mead Johnson Award for outstanding research, a plaque and \$150 cash award for his paper "The

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Immunochemical Characteristics of a Human Antibody to Factor 13" at the SAMA-UTMB National Student Research Forum.

W. Ronnie Neal, first prize, received an honorable mention in the Mead Johnson Awards for his paper "Detection of Genetic Variance of Hemophilia B With an Immunosorbent Technique" at the SAMA-UTMB National Student Research Forum.

* * *

Dr. William D. Huffines, professor of pathology and associate dean, has been elected president of the University of North Carolina Chapter of Sigma XI, national organization dedicated to the encouragement of research in the various fields of pure and applied science.

* * *

When John M. Danielson came here several weeks ago to direct North Carolina Memorial Hospital he took one of the hottest seats in contemporary American medicine.

His is a hot seat because he is about to launch a major hospital on a voyage through uncharted waters while hospital administrators and medical school deans from 50 other universities observe from a safe distance.

Danielson's role is unique, enviable and threatening because N. C. Memorial Hospital is the first and only university hospital in the United States to break away from university and medical school control.

Many other hospitals have sought independent status, but have failed.

The independent status followed action by the 1971 N. C. Legislature which established a 12-member board of trustees to govern North Carolina Memorial Hospital.

If Danielson is successful in developing and implementing an ideal working relationship between his hospital and the medical school, his solution will also become a national first.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Dr. Charles Tanford, professor of physical biochemistry in the Duke University School of Medicine, has been elected to membership in the National Academy of Sciences—one of the highest honors that can be accorded an American scientist or engineer.

Tanford is among 75 new members elected during the academy's annual meeting in Washington.

A member of the Duke faculty since 1960, he is author of an advanced textbook, *Physical Chemistry of Macromolecules*, and some 125 research papers in fields of protein chemistry. Tanford has been inter-

Pre-Sate® (chlorphentermine HCl)

CAUTION: Federal law prohibits dispensing without prescription.

Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e., several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monoamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation, overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information available on request.



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ested primarily in applying principles of physical chemistry to problems in the biological sciences.

Election to the exclusive NAS membership caps a long list of honors for Tanford, including his being named James B. Duke Professor of Biochemistry in 1970.

* * *

A faculty member at Duke was named the 1972 recipient of the C. Judson Herrick Award by the American Association of Anatomists.

Dr. William C. Hall, assistant professor of anatomy, received the award at the Association's annual meeting in Dallas, Tex.

The award annually goes to a young investigator who has made outstanding contributions to the field of comparative neurology. Hall's research work has centered on the comparative anatomy of the cerebral cortex.

Hall, who also holds an appointment as assistant professor of psychology, received both his undergraduate education and Ph.D. in physiological psychology at Duke. In July of last year he won the National Institutes of Health Research Scientist Career Development Award.

* * *

Dr. John W. Everett, professor of anatomy, is the new president-elect of the American Association of Anatomists, the first Duke faculty member ever elected to head the 2,000-member group.

Everett, who received his doctorate in zoology at Yale in 1932, came to Duke the same year as an instructor in anatomy. He was appointed full professor in 1950. Last year he won the third annual Carl G. Hartman Lectureship Award of the Society for the Study of Reproduction.

* * *

Dr. Wolfgang Karl Joklik, chairman of the Department of Microbiology and Immunology, has been named to a James B. Duke professorship, Duke's highest academic honor.

Joklik, noted for his research in cell biology and virology, came to Duke in 1968 from the Albert Einstein College of Medicine, where he was Siegfried Ullman Professor of Cell Biology.

He received his bachelor and master's degrees in biochemistry at the University of Sydney and his doctorate in virology at Oxford.

* * *

Five faculty members have been promoted to full professors.

Named to professorships in medicine were Drs. James R. Clapp, Johannes A. Kylstra, Harry T. McPherson and Wendell F. Rosse.

Clapp, a 1957 graduate of the University of North Carolina School of Medicine, took his postgraduate training at the Southwestern Medical School in Dallas, Tex. He came to Duke in 1963.

Kylstra received both his M.D. and Ph.D. in phy-

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References: 1. Olsen, J R.: *Journal-Lancet* 85 287 (July) 1965. 2. Giorlando, S W.: *Ob/Gyn Dig.* 13 32 (Sept.) 1971. 3. Decker, A.: Case Reports on File, Medical Department, Julius Schmid. 4. Giorlando, S W., Torres, J.F., and Muscillo, G. *Am. J. Obst. & Gynec.* 90: 370 (Oct. 1) 1964. 5. Lechevalier, H.: *Antibiotics Annual 1959-1960*. New York, Antibiotica Inc., 1960. pp. 614-618. 6. Friedel, H.J.: *Maryland M J.* 15:36 (Feb.) 1966.

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siology at the University of Leiden in the Netherlands. He came to Duke as assistant professor of medicine and physiology in 1965 and was promoted to associate professor of medicine the following year. He retains his title as associate professor of physiology.

McPherson received both his medical degree and postgraduate training at Duke University. He was appointed associate in the Department of Medicine in 1955.

Rosse earned an M.S. in physiology at the University of Nebraska and a medical degree at the University of Chicago. In 1968 he was named an associate professor of medicine at Duke.

Promoted to full professor in the Department of Psychiatry was Dr. Erdman B. Palmore. Palmore came to Duke in 1967 as associate professor of both medical sociology and sociology.

He received his master's in sociology at the University of Chicago in 1954 and his doctorate at Columbia University in 1959.

* * *

Dr. William G. Anlyan, vice president for health affairs, and Dr. Thomas D. Kinney, director of medical and allied health education, participated in the Allen O. Whipple Surgical Society program in New Haven, Conn. Anlyan moderated a panel on graduate surgical education, and Kinney was one of the panel participants, representing the Association of American Medical Colleges.

* * *

Eight other academic appointments have been made:

Dr. Shelia Counce, who came to Duke from Yale in 1965, was promoted to associate professor of anatomy.

Dr. John A. Gehweiler Jr., at Duke since 1967, was promoted to associate professor of radiology.

Four were appointed to assistant professorships in medicine—Drs. David L. Brewer, Harvey J. Cohen, Robert W. Rosati and Galen S. Wagner.

Dr. E. Lee Tyrey was named to assistant professorships in anatomy and obstetrics-gynecology.

Dr. Robert E. Zipf Jr., who is medical examiner for Durham County, was promoted to assistant professor of anatomy.

News Notes from the—

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through a \$1 million grant from the National Cancer Institute.

The grant will provide \$327,554 for the center's first year of operation.

Dr. Charles L. Spurr, professor of medicine, has been named director of the research center. He said that a broadly based multidisciplinary attack on numerous aspects of the disease is planned.

The research program initially will involve scientists in eight medical school departments — medicine, surgery, radiology, obstetrics-gynecology, pediatrics, biochemistry, pharmacology, and microbiology. It also will include problems of interest to the Department of Community Medicine and the Behavioral Science Center.

* * *

Dr. George W. Thorn, professor of the Theory and Practice of Physic at Harvard Medical School, presented the first Wingate Johnson Memorial Lecture recently at Bowman Gray.

He spoke on "Non-specific Use of Steroids."

The visiting professorship was established recently as a living memorial to the late Dr. Wingate M. Johnson, former professor of medicine.

Established through a gift from Dr. Johnson's children—Dr. Livingston Johnson of Shelby and Mrs. E. W. Jackson of Durham—the professorship each year will be awarded to a physician of national renown, "who can illustrate for this generation of clini-

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cians at Bowman Gray some of the personal and professional qualities that Dr. Johnson demonstrated for earlier generations."

* * *

Dr. Eben Alexander, Jr., professor and director of the Section on Neurosurgery, has been named president of the world's oldest and most exclusive neurosurgical organization, the Society of Neurological Surgeons.

He was installed at the 63rd annual meeting of the society and succeeds Dr. William F. Meacham, professor of neurosurgery at Vanderbilt University School of Medicine.

The primary purpose of the organization is education. It also places emphasis on the encouragement of young men in the profession and the support of excellence in neurosurgery.

Dr. Alexander, who was elected to membership in the organization in 1956, is a past president of the Harvey Cushing Society, now known as the American Association of Neurological Surgeons.

* * *

Dr. C. Douglas Maynard, associate professor of radiology and associate dean for student affairs at Bowman Gray, recently participated in a nuclear medicine symposium in Perth, Australia and in the annual meeting of the Australian and New Zealand Society of Nuclear Medicine.

He spoke on "Two Cerebral Dynamic Studies as an Adjunct to the Brain Scan," "Platelet Survival in Sequestrian Studies," and "Teaching Nuclear Medicine to Students" during the symposium in Perth.

He presented two papers at the meeting of the Australian and New Zealand Society of Nuclear Medicine: "Nuclear Medicine—the Next Five Years" and "Effect of Time on the Brain Scan."

* * *

Dr. Felda Hightower, professor of surgery, was honored recently at a meeting of the surgeons who completed their residency training in surgery at North Carolina Baptist Hospital and the Bowman Gray School of Medicine.

They presented him a unique plaque, on which was inscribed: "To Felda Hightower, M.D.—Gentleman, Scholar, Farmer, Raconteur and Surgeon-Par Excellence."

The surgical residency program at Baptist Hospital was established in 1941. During the past 31 years, 75 surgeons have completed the full residency training program and more than 250 have taken at least part of their training in the program. Dr. Hightower was the third person to complete the residency program.

* * *

Dr. Katherine Anderson, associate professor of pediatrics, has been appointed by the American Academy of Pediatrics to serve on the American Medical Association's Joint Review Committee on Educational Programs for the Assistant to the Primary Care Physician.

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Dr. Michael A. Stein, resident in surgery, is the recipient of three awards from the Southeastern Surgical Congress for the "best scientific paper" presented at the organization's 40th annual meeting in Washington, D. C. His paper on "Renal Protection During Aortic Cross-Clamping" won the Gold Medal Paper Award, the President's Award, and the Conrad Jobst Foundation Award.

* * *

Dr. Joseph Whitley, professor of radiology, has been appointed chairman of the Subcommittee on Diagnosis of the Association of University Radiologists' Advisory Committee on Academic Radiology.

* * *

Two members of the Department of Physiology at Bowman Gray participated in a meeting of the Microcirculatory Society in Atlantic City, N. J. Dr. Phillip M. Hutchins, assistant professor, gave a paper on "Microcirculatory Dimensions in Spontaneously Hypertensive Rats." Glenn Bohlen, graduate student, spoke on "Intestinal Villi Microcirculation During Hemorrhagic Shock."

* * *

Dr. Francis M. James, associate professor of anesthesia, presented a paper at a meeting of the Society for Obstetrical Anesthesia and Perinatology in Denver, Colo. He spoke on "The Use of Inflatable Boots to Prevent Hypotension During Spinal Anesthesia for Cesarean Section."

Dr. Paul M. James, Jr., assistant professor of surgery, presented a paper on "Supraclavicular Approach to Central Venous Pressure" at a meeting of the Southeastern Surgical Congress recently in Washington, D. C.

* * *

Dr. Wayne A. Krueger, assistant professor of anatomy, presented a paper on "The Effect of a Polyethylene IUD on Implantation" at the 85th annual session of the American Association of Anatomists in Dallas, Tex.

* * *

Dr. James F. Martin, professor of radiology, participated in a meeting of the Eastern Radiological Society recently in Hawaii. He presented a paper entitled "Mucous Plug Disease of the Lungs."

* * *

Dr. Stephen H. Richardson, professor of microbiology, was the American Society of Microbiology Foundation Lecturer at Pennsylvania State University. He spoke on "Studies on Cholera Enterotoxin."

* * *

Dr. Michael J. Walsh, assistant professor of pharmacology, participated in the annual meeting of the National Council on Alcoholism recently in Kansas City, Mo., where he spoke on "Biogenesis of Biologically Active Alkaloids from Amines by Alcohol and Acetaldehyde."



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News Notes from the—

**NORTH CAROLINA REGIONAL
MEDICAL PROGRAM**

With the help of the North Carolina Regional Medical Program, North Carolina will soon become one of the few states in the country with a MAST Program. MAST (Military Assistance to Safety and Traffic) is a program utilizing military helicopters and medical corpsmen as an adjunct to the existing emergency medical service system (EMS) for the purpose of providing assistance to civilian victims of medical emergencies, including traffic accidents. At the national level, MAST is coordinated by the Departments of Defense, Transportation, and Health, Education, and Welfare.

The results of five MAST Pilot Projects in 1970-71 warranted expansion of the program to additional sites. This service was formally offered to North Carolina through the Army Aeromedical Unit located at Fort Bragg, N. C. MAST flights, considered normal helicopter training flights, will be available 24 hours per day, seven days a week, at no direct cost to the patients, participating medical facilities, or the State of North Carolina.

Among the requirements for participation in the MAST program is the formation of a Coordinating Committee, chaired by a civilian, which can do the necessary planning and administration, coordinate with similar operations in adjoining states, and insure integration of MAST operations into a state-wide EMS system. It is in meeting this requirement that the North Carolina Regional Medical Program, designed to improve the quality and accessibility of health care for all North Carolinians by bringing together existing health resources, has played an appropriate and catalytic role.

Mr. William W. Lowrance, Director of NCRMP's Hospital Division, and Mr. John Young of NCRMP's Division of Planning and Evaluation have worked with the appropriate Military Officials at Fort Bragg and with other cooperating agencies in forming a permanent MAST Coordinating Committee and in developing a plan for using MAST aircraft in a manner acceptable to the MAST Executive Committee in Washington.

The permanent MAST Coordinating Committee will be composed of representatives of the Military, the Medical Society of the State of North Carolina, the N. C. Hospital Association, the N. C. Board of Health, the N. C. State Highway Patrol, the Governor's Highway Safety Program, the N. C. Civil Defense, the North Carolina Regional Medical Program, the Office of Comprehensive Health Planning, the N. C. Medical Care Commission, the Office of the Attorney General, ambulance providers, and others

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as selected. One civilian member of the MAST Coordinating Committee will be designated as civilian coordinator, and the military will designate someone to coordinate the military aspect of the project.

Due to the limitations of the helicopter aircraft, the MAST operations will be conducted initially within a radius of 80-100 statute miles from Fort Bragg. Within a smaller radius, ground ambulance is generally more effective, while a greater radius is more suitable for fixed wing aircraft. MAST aircraft will be used only when ground transportation is medically inappropriate or not available and time is a vital factor.

MAST operation is one of a state-wide Emergency Medical Services system. Since the extensive facilities for a comprehensive EMS system do not exist at this time, the utilization of MAST aircraft in North Carolina will be in two phases. Phase I will include the interhospital transfer of stabilized patients, donor organs, drugs, blood, and medical personnel or equipment involving only communications equipment presently installed in MAST and North Carolina vehicles and stations. These operations will generally be conducted to and from established airports and heliports. During Phase II, pick-up and delivery of patients, personnel or equipment at sites which require air-ground voice communications and trained personnel on the ground and in the air to effect safe landings will be added.

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Initially, all requests for MAST aircraft will be communicated to a central coordinating MAST Switchboard by telephone. When referring physicians and MAST consulting physicians agree that a helicopter is necessary, the Switchboard physicians will contact the MAST base unit by direct phone connection to lay on the mission. During Phase II, which will be concurrent with the development of a Comprehensive EMS system, rescue personnel and/or law enforcement officers will also judge the necessity of a helicopter mission, having received the appropriate training.

* * *

A brochure describing the program of Continuing Education in Nuclear Medicine at the Bowman Gray School of Medicine is now available to those interested in improving patient care by bringing to physicians, technologists, and pharmacists the latest information in nuclear medicine. The program developed by the Department of Radiology (Nuclear Medicine) and the Division of Continuing Education at Bowman Gray and funded by the North Carolina Regional Medical Program as part of its Comprehensive Cancer Program, consists of self-instruction by use of audiovisual aids and participation in the day-to-day operation of the clinical laboratory.

Because the program is largely self-instructional, there is considerable flexibility in scheduling. Individuals may arrange their own times and dates for the program. Self-instructional materials are available on scanning techniques for liver, lung, brain, thyroid, spleen, and bone. Other materials examine thyroid uptake studies, fat absorption studies, scintillation detector and spectrometer, collimation, cerebral dynamic studies, 99m Tc labeled compounds, and T-3 uptake test.

Persons interested in participating in this program or obtaining copies of the brochure should contact: C. Douglas Maynard, M.D., Nuclear Medicine Laboratory, Bowman Gray School of Medicine, Winston-Salem, N. C. 27102 or Vicki Y. Reddick, B.A. (Coordinator), Nuclear Medicine Laboratory, Bowman Gray School of Medicine, Winston-Salem, N. C., 27103, Telephone (919) 727-5022.

* * *

The Diabetes Project of the North Carolina Regional Medical Program now has available four diabetes mellitus teaching aids. These are *Select-A-Meal*, \$3.00, a dietary teaching tool which displays the diabetic diet in color-coded pictures and includes a "Personal Meal Plan" chart on which the instructor may indicate the desired caloric level and dietary pattern for the individual patient; *Diabetes Mellitus Assessment Guides*, \$1.50, an interview guide with carefully worded questions and suggestions for patient observation; *Guidelines to Diabetic Management*, \$2.00, a booklet in which several diabetes specialists present approaches which they have found useful with their own patients; and *Illus-*

trated *Help for the Diabetic Patient*, \$1.50, a cartoon book covering insulin administration, hypo- and hyperglycemia, urine testing, and care of feet, developed for use in teaching patients who have difficulty with the written word.

Publications may be ordered from: Diabetes Project, NCRMP, 412 West Franklin Street, Chapel Hill, N. C., 27514. Checks should be made to "NCRMP" and N. C. residents should add 4 percent sales tax. A brochure describing the publications in more detail is also available from the Diabetes Project upon request.

* * *

More than 200 people from throughout the nation attended the Fourth Annual Duke Physician's Associate Conference held on April 20 and 21 at the Durham Hotel. The central theme of a two-day session involved curriculum changes and program development of the physician's associate concept, which began at Duke in 1965.

The first formal program for educating and training the highest level of physician's assistant, the Duke Physician's Associate Program is in the second year of triennial funding from the North Carolina Regional Medical Program. As part of its statewide involvement with manpower training and development, NCRMP has allocated over \$227,000 (direct costs) to the Duke PA Program since July of 1970.

* * *

The North Carolina Regional Medical Program was among those co-sponsoring the 6th Annual Symposium on Malignant Disease held in the Clinic Auditorium of UNC School of Medicine on April 6-7. The Symposium, entitled "Leukemia: Acute and Chronic," had an attendance of 238, including physicians, students, and others. Sponsors were the oncology faculty and the Clinical Cancer Training Program of the UNC School of Medicine.

AMERICAN HOSPITAL ASSOCIATION

Regulations proposed recently by the Secretary of HEW requiring that hospitals increase their charity work in order to qualify for and retain Hill-Burton funding "is seeking to relieve a governmental responsibility by further burdening the private institution," stated the American Hospital Association.

"The failure of government at the national, state and local levels to pay in full for services provided to the beneficiaries of these governmental programs adds severely to the financial crisis faced by health care institutions," said Madison B. Brown, M.D., acting executive president of the AHA, on behalf of the nation's hospitals. "In addition, although we have tried to cooperate fully with Phase II regulations, hospitals have increased financial problems because of these restrictions."

On April 18, Secretary Richardson proposed that all health care facilities, which have received Hill-Burton grants, loans or loan guarantees, provide free

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services to the poor at a level of not less than five per cent of their total operating costs or not less than 25 per cent of their net incomes, whichever is greater.

Dr. Brown emphasized that AHA has and will continue to support the broad objective of high quality health care for all people, and that this support

is currently being demonstrated through services for the poor and near poor in hospitals.

He further stated that the Association is "gravely concerned" by the implications for hospitals of the Secretary's recommendations and is preparing a detailed statement of specific objections to those recommendations.

Month in Washington

House-Senate differences and time pressures may well stall congressional action this year on the three major health measures before the lawmakers . . . national health insurance, health maintenance organizations (HMO's), and the Social Security Amendments to Medicare and Medicaid.

The death knell for national health insurance in this Congress may have been rung by House Ways and Means Committee chairman Wilbur Mills (D-Ark.), who now says he doubts if he will hold even executive sessions on the controversial measure.

The Medicare-Medicaid amendments (H.R. 1) which contain the professional standards review organization plan (PSRO), medicare for the disabled, and other amendments to the Social Security law, seem to face a rocky, uphill road in the Senate. One of the many controversial measures in the bill is Senator Long's (D-La.) catastrophic protection measure. To date Chairman Long has failed to sell the catastrophic proposal to a majority of his fellow members of the Senate Finance Committee. To make Long's road even tougher to travel are grumblings from Mills over in the House that he won't buy the catastrophic proposal, nor PSRO as presently written. But Long is a wiley maneuverer and the chances that the Senate can come up with a version of H.R. 1 satisfactory to the House are still not completely dead.

Not yet quite counted out this year are the HMO proposals in both the Senate and House. Senator Edward Kennedy (D-Mass.) insists he's going to push hard and swiftly for his sweeping HMO plan, but Administration and House health lawmakers view Kennedy's plan as too expensive, too rigid. Settling these differences and working out a satisfactory compromise in limited time remaining for Congress might be tough.

* * *

The American Medical Association has urged Congress to observe a "flashing yellow light of caution" before rushing into large-scale HMO programs.

Testifying before the House Subcommittee on Health and Environment were John R. Kernodle, M.D. (Burlington, N. C.), vice chairman of the speaker of the Association's House of Delegates, and Russell B. Roth, M.D., speaker of the Association's House of Delegates.

Dr. Kernodle said that "considerable funds have already been allocated for HMO's. We urgently need to evaluate these initial efforts."

The North Carolina group practitioner told the subcommittee that the AMA favors a pluralistic system of medical care.

"We believe different methods of medical care should be allowed to compete freely in the marketplace to satisfy varying public demands," he said.

"We strongly believe that no one method of medical care can satisfy all. No one method of care should be imposed and no one method should be so heavily subsidized or otherwise encouraged as to undermine the working of free choice.

"Believing in a pluralistic approach we feel that HMO's merit trial. But the basis should be limited, experimental. The possible benefits to health in terms of service rendered and their possible efficiencies in terms of cost reduction should then be objectively measured against the possible shortcomings and deficiencies."

Dr. Kernodle noted that the Administration has made 110 planning and development grants, and is requesting \$27 million in a supplemental budget for this year and \$60 million next year to speed these programs.

"Conceivably," he said, "the HMO could solve some of our problems. But that is not yet proven.

"HMO's could represent a giant step backwards to a type of contract medicine the public rejected half a century ago."

Dr. Kernodle said that even in recent years contract medicine has had a "sobering record of failure—the passing of the Rip Van Winkle group in Hudson, N. Y., declining enrollments in the Com-

munity Health Association of Detroit, and the Inter-County Hospital Plan of Johnston, Pa.—all these signals flash bright yellow caution light.”

The AMA official questioned “the ability of the HMO to fulfill the public hope for the kind of medical care they want at a low cost.”

“We question too that the type of practice offered in an HMO will attract a substantial segment of the medical profession,” he added.

“I hope I have suggested that there is much reason to proceed with caution. We should first gain experience with test models and see if they fly before we order a whole fleet.

“Considerable funds have already been allocated for HMO’s. What is urgently needed now is a sound, objective mechanism with which to evaluate the initial efforts.”

In his testimony, Dr. Roth also urged the subcommittee members to be cautious in expanding HMO programs. He said:

“The federal government has already made some 110 grants for planning and for feasibility studies for HMO’s. But the results of these studies and plans are as yet unknown in terms of the quality and extent of the services which can be provided, their accessibility to beneficiaries, the cost of providing them, and their acceptability to consumers and providers alike.”

Dr. Roth concluded, “We further propose a moratorium on the funding of additional planning for, or subsidy of, HMO operation until existing experimental programs can be evaluated in terms of quality of service, efficiency, availability, and economy.”

* * *

Mobile x-ray equipment should not be used for general-population surveys for tuberculosis and other chest diseases, declares the American College of Chest Physicians, American College of Radiology, and the Food and Drug Administration, in a joint statement.

The equipment used in many parts of the country “is not productive as a screening procedure for chest disease detection,” the statement continues.

The joint statement supersedes a 1958 policy declaration by the U.S. Surgeon General that said mass

chest x-rays should be conducted “selectively” with groups “at high risk of tuberculosis infection.”

The new policy was indicated “in large part by the fact that tuberculosis is now almost nonexistent in many regions of the country,” said Merlin K. DuVal, M.D., HEW Undersecretary for Health and Scientific Affairs. “The use of mobile equipment, which requires relatively higher levels of x-ray exposure than fixed equipment, simply cannot be justified.”

The new policy recommends full size x-ray film when x-ray screening of selected population groups is essential. The recommendation is intended to discourage the use of photofluorographic equipment that uses a fluoroscope screen in combination with miniature photographic film.

* * *

In hopes of retaining and attracting sufficient numbers of physicians in the armed forces without resorting to a continuation of the physician draft, the Administration offered Congress a special pay program under which military physicians could earn above \$40,000 a year.

Under the plan, the military services are authorized to give physicians as much as \$17,000 a year in extra pay. This would be on top of \$350 a month above the base pay for their rank after two years of service.

The bill also continues the special pay provision now in effect, but that would expire when the draft ends, of \$100 a month additional for the first two years of service. At present, the \$100 a month is increased to \$350 a month in steps after two years of service. However, the bill speeds the process up by inaugurating the \$350 monthly special pay immediately after two years. The \$17,000 continuation pay is a maximum and most physicians would not receive this much. Thus after two years, a military physician could earn at most the salary of his rank, plus \$350 a month, plus \$17,000 a year.

The bill also provides that public health service commissioned corps officers could receive up to four months additional pay per year over their military rank salary for signing up.

A lazy disposition proves likewise very hurtful to girls at [menarche]. One seldom meets with complaints from obstructions amongst the more active and industrious part of the sex; whereas, the indolent are seldom free from them. These are in a manner eaten up by the chlorosis, or green-sickness, and other diseases of this nature.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 356.*

NORTH CAROLINA MEDICAL JOURNAL
OPERATING STATEMENT
1971

JOURNAL BUDGET — B

Journal Budget total expense for twelve months ended December 31, 1971, including		
Roster, Transactions & Annual Reports.....		\$71,349.61
Subscriptions for Dues Paying Members, 3,687 @ \$5.00	\$18,435.00	
INCOME:		
Roster & Journal Sales.....	4,925.48	
Author Cuts	—0—	
Local Advertising	9,645.28	
National Advertising	31,361.77	
LESS total Income.....		—64,367.53
EXCESS of Expenditures over Income.....		\$ 6,982.08
Loss per member @ 3,687 paying dues.....		\$ 1.89
Member Allocated Subscription Rate.....	\$ 5.00	
Plus Loss per member.....	1.89	
*Actual average cost of Journal per dues paying member.....	\$ 6.89	

* Note that 285 Life Members plus exempt members get the Journal gratis as an emolument of such class of membership.

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Book Reviews

A Decade of Progress: The United States Army Medical Department 1959-1969. Edited by Rose C. Engelman. 214 pages. Price, \$2.25. Office of the Surgeon General, Washington, D. C., 1971.

Lieutenant General Leonard D. Heaton was appointed Surgeon General of the United States Army in June, 1959, and held that position until June, 1969. This volume is, then, the chronicle of General Heaton's tenure and the activities and accomplishments of the Medical Department of the Army under his command.

After an opening tribute to General Heaton, the book covers every aspect of army medicine in concise sections written in a style not unfamiliar to those accustomed to military publications. The review of professional activities includes medicine, surgery, preventive medicine, the nursing and dental services, physical standards, and a relatively long section on the military blood program, which at its peak was handling more than 30,000 units of blood a month. Other chapters cover the modernization of facilities and equipment required for the expanded needs of the Army; personnel recruitment and planning; the training of professional and paramedical personnel; supply and management; and research and development. The book closes with short summaries of the medical operations in Lebanon, the Dominican Republic, the Cuban crisis, emergency relief in the wake of earthquakes in Chile, Skopje, Yugoslavia and Alaska, and, of course, the Medical Department's role in Vietnam.

Although based mostly on the annual reports of the Surgeon General and written expressly for members of the military, this little book will be a starting place for anyone interested in the magnitude of the

problem of providing medical care for a large military force. It could well serve as an outline for another work in the grand tradition of the Medical and Surgical History of the War of the Rebellion.

HOWARD M. WISOTZKEY, M.D.

Doctor and Patient and the Law. Edition 5. By R. Crawford Morris and Alan R. Moritz. 554 pages. Price, \$24.50. St. Louis, Missouri: C. V. Mosby Company, 1971.

This book is a splendid medicolegal text, a successor to a publication bearing the same name authored by Louis J. Ragan, M.D., LL.B, of Los Angeles, California, who died in 1955. As the authors have stated, they have attempted to retain Dr. Ragan's original purpose: the presentation of a concise treatment of the field of legal medicine. In this purpose they have certainly succeeded.

Unlike many legal texts, the book is easy to read, and indeed would hold the interest of a layman.

Every aspect of the medicolegal field is covered, including suggested authorization forms of various types, and a very full bibliography is given at the end of each chapter. One interesting innovation is a "self-test" in professional liability vulnerability. A short chapter on a program for the prevention of professional liability is included.

This is a day of rapidly changing concepts in almost every field, medicine and law not excluded. This work, the fifth edition, keeps step with the sweeping changes that are occurring in many areas of medicolegal affairs.

JULIUS A. HOWELL, M.D.

The confinement of females, besides hurting their figure and complexion, relaxes their solids, weakens their minds, and disorders all the functions of the body. Hence proceed obstructions, indigestion, flatulence, abortions, and the whole train of nervous disorders. These not only unfit women for being mothers and nurses, but often render them whimsical and ridiculous. A sound mind depends so much upon a healthy body, that where the latter is wanting, the former is rarely to be found.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 355.*

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES: NORTH CAROLINA,
MARCH 1972 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	March 1972	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	March 1972		Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	March 1972	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	
	March 1972	April 1971 - March 1972				March 1972	April 1971 - March 1972					March 1972	April 1971 - March 1972								
NORTH CAROLINA	155	1772	66984	26.5	97	1245	28838	43.2													
ALAMANCE	5	35	1225	28.6	6	21	416	50.5	PENDER		4	163	-			2	153	-			
ALEXANDER		13	350	37.1		1	35	-	PERQUIMANS		1	61	-				52	-			
ALLEGHANY		3	118	-			6	-	PERSON		8	276	28.0	1	10	213	46.9				
ANSON	1	7	188	37.2		14	253	55.3	PITT	2	22	630	34.9	2	24	650	36.9				
ASHE	2	11	297	37.0			1	-	POLK		2	139	-		1	28	-				
AVERY		11	229	48.0					RANDOLPH	2	41	1218	33.7	1	6	114	52.6				
BEAUFORT		8	402	39.9	1	14	242	57.9	RICHMOND	2	14	451	31.0		12	264	45.5				
BERTIE		6	108	55.6		9	229	39.3	ROBESON	2	13	641	20.3	3	66	1690	39.1				
BLADEN		4	248	-	1	6	210	28.6	ROCKINGHAM	3	34	1028	33.1	3	27	401	67.3				
BRUNSWICK	1	4	360	-		10	163	61.3	ROWAN	1	22	1142	19.3	1	14	326	42.9				
BUNCOMBE	8	61	1956	31.2		15	269	55.8	RUTHERFORD	1	20	662	30.2		6	165	36.4				
BURKE	1	21	1028	20.4	1	8	94	-	SAMPSON		7	430	16.3	1	17	328	51.8				
CABARRUS	3	22	955	23.0		10	318	31.4	SCOTLAND	1	15	318	47.2		13	304	42.8				
CALDWELL	3	22	1033	21.3		3	84	-	STANLY		14	629	22.3		9	128	70.3				
CAMDEN		2	60	-			39	-	STOKES		7	390	17.9		3	65	-				
CARTERET	1	11	523	21.0		1	80	-	SURRY	2	27	870	31.0		2	51	-				
CASWELL	1	10	162	61.7		10	179	55.9	SWAIN			111	-		1	67	-				
CATAWBA	4	52	1516	34.3		7	237	29.5	TRANSYLVANIA		13	281	46.3			27	-				
CHATHAM	1	11	338	32.5		5	154	32.5	TYRRELL		1	21	-		4	31	-				
CHEROKEE		8	267	30.0		1	14	-	UNION	2	20	768	26.0	4	23	349	65.9				
CHOWAN	1	4	85	-		3	110	-	VANCE	2	8	339	23.6	1	16	346	46.2				
CLAY	1	3	101	-			1	-	WAKE	6	76	2907	26.1	2	42	1120	37.5				
CLEVELAND	2	39	1014	38.5		18	398	45.2	WARREN		2	73	-		1	9	182	49.5			
COLUMBUS	6	27	559	48.3	1	13	364	35.7	WASHINGTON		1	124	-		1	16	134	118.4			
CRAVEN	2	29	1189	24.4	1	19	403	47.1	WATAUGA	1	10	348	28.7		1	6	-				
CUMBERLAND	8	83	3965	20.9	3	57	1674	34.1	WAYNE	6	36	1161	31.0	4	29	628	46.2				
CURRITUCK	1	2	82	-			44	-	WILKES	3	30	840	35.7		2	56	-				
DARE	1	3	98	-			9	-	WILSON	1	10	488	20.5		15	528	28.4				
DAVIDSON	5	45	1537	29.3		17	245	69.4	YADKIN		11	381	28.9	1	1	26	-				
DAVIE		9	287	31.4		3	66	-	YANCEY		6	199	30.2			3	-				
DUPLIN	1	10	401	24.9	2	13	303	42.9	Cities City totals are also included in county totals												
DURHAM	3	39	1295	30.1	3	38	913	41.6	ALBEMARLE		1	145	-		1	40	-				
EDGECOMBE	1	8	394	20.3	4	21	500	42.0	ASHEBORO		4	203	-			26	-				
FORSYTH	2	53	2550	20.8	6	34	1181	28.8	ASHEVILLE	1	20	627	31.9		14	243	57.6				
FRANKLIN		3	192	-	2	15	246	61.0	BURLINGTON	3	19	476	39.9	1	5	135	37.0				
GASTON	1	54	2588	20.9	1	23	500	46.0	CHAPEL HILL		7	256	27.3		2	58	-				
GATES		2	59	-	1	5	92	-	CHARLOTTE	6	61	2742	22.2	7	87	2042	42.6				
GRAHAM		2	110	-			7	-	CONCORD	2	8	180	44.4	1	4	127	-				
GRANVILLE	2	15	224	67.0	1	18	323	55.7	DURHAM	2	21	778	27.0	2	30	795	37.7				
GREENE		5	83	-		7	127	55.1	EDEN	1	7	197	35.5		4	60	-				
GUILFORD	6	81	3463	23.4	8	71	1624	43.7	ELIZABETH CITY		4	122	-		3	96	-				
HALIFAX	1	16	384	41.7	3	25	590	42.4	FAYETTEVILLE	2	27	1029	26.2	3	36	631	57.1				
HARNETT	2	12	649	18.5	1	23	295	78.0	GASTONIA		21	707	29.7		9	253	35.6				
HAYWOOD	1	16	666	24.0			15	-	GOLDSBORO	1	8	282	28.4	3	15	267	56.2				
HENDERSON		22	697	31.6	1	1	41	-	GREENSBORO	4	40	1689	23.7	5	47	1048	44.8				
HERTFORD	1	2	133	-	1	14	248	56.5	GREENVILLE		8	254	31.5		5	185	27.0				
HOKE		2	124	-	2	13	238	54.6	HENDERSON	2	4	160	-	1	5	146	34.2				
HYDE		3	39	-	1	3	54	-	HICKORY		15	297	50.5		4	120	-				
IREDELL	2	23	945	24.3	1	14	341	47.1	HIGH POINT	1	21	749	28.0	3	18	411	43.8				
JACKSON	2	8	273	29.3		2	62	-	JACKSONVILLE	3	15	378	39.7		2	74	-				
JOHNSTON	2	21	781	26.9	1	19	302	62.9	KINSTON	2	9	246	36.6		13	226	57.5				
JONES			83	-			88	-	LENOIR		2	195	-		1	44	-				
LEE		11	419	26.3	2	12	188	63.8	LEXINGTON		13	257	50.6		6	90	-				
LENOIR	2	19	545	34.9	1	25	445	56.2	LUMBERTON	1	4	220	-	1	10	204	49.0				
LINCOLN	1	13	545	23.9	1	4	112	-	MONROE		1	128	-		9	107	84.1				
MCDOWELL		12	517	23.2		2	48	-	MORGANTON	1	6	124	48.4	1	3	25	-				
MACON		5	233	21.5			10	-	NEW BERN	1	3	163	-		6	141	42.6				
MADISON		13	244	53.3			3	-	RALEIGH	2	39	1313	29.7	1	33	592	55.7				
MARTIN	1	3	204	-		14	272	57.5	REIDSVILLE		3	146	-		8	99	-				
MECKLENBURG	9	94	4484	21.0	7	96	2363	40.6	ROANOKE RAPIDS	1	6	187	32.1		3	33	-				
MITCHELL	1	4	202	-			1	-	ROCKY MOUNT E		1	96	18.6	1	6	129	55.8				
MONTGOMERY	1	5	246	20.3		4	122	-	ROCKY MOUNT N	1	5	226	-		7	104	-				
MOORE	3	18	460	39.1		13	249	52.2	SALISBURY	1	4	183	-	1	5	144	34.7				
NASH	3	11	595	18.5		12	513	23.4	SANFORD		4	149	-		1	6	81	-			
NEW HANOVER	1	27	1210	22.3	1	17	456	37.3	SHELBY		9	162	55.6		3	110	-				
NORTHAMPTON		2	103	-	2	18	310	58.1	STATESVILLE		4	211	-		6	170	35.3				
ONSLOW	7	66	2384	27.7		7	419	16.7	THOMASVILLE	1	7	199	35.2		8	91	-				
ORANGE	3	21	739	28.4		14	222	63.1	WILMINGTON	1	16	543	29.5	1	16	397	40.3				
PAMLICO	1	3	84	-	1	5	69	-	WILSON		3	237	-		8	244	32.8				
PASQUOTANK	7	268	28.1	-	6	174	34.5	-	WINSTON SALEM	1	23	1184	19.4	6	34	1118	30.4				

Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

NORTH CAROLINA

Medical Journal

IN THIS ISSUE: Message of the President to the House of Delegates, Charles W. Styron, M.D.; The Medical Society, the Doctor, and the Patient, Charles W. Styron, M.D.; Drinking-Water Lithium and Mental Hospital Admissions in North Carolina, A. Wouter Voors, M.D.; Accomplishments of the House of Delegates, James E. Davis, M.D.



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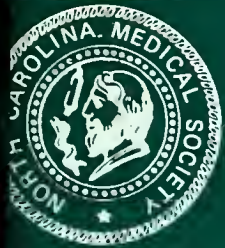
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The negative power of undue anxiety
in congestive heart failure...

This man thinks he can no longer
take breathing for granted.



PRESIDENT'S NEWSLETTER

NORTH CAROLINA MEDICAL SOCIETY

No. 2

July 5, 1972

The Delegation from the North Carolina Medical Society has just returned from the 121st. Annual Convention of the American Medical Association in San Francisco where they were a part of the registration of 30,000, of which 11,062 were physicians. Detailed coverage of the convention is published in the June 26 and July 3 issues of the American Medical News, but of particular interest is the fact that at the organizational meeting of the new AMA Board of Trustees John R. Kernodle, M.D. of Burlington, N. C. was elected Chairman. He succeeds Dr. Max Parrott of Oregon who was ineligible after two terms as Chairman.

In his inaugural address, President C.A. Hoffman, M.D., called on physicians to examine the causes of factionalism--"the infringements on the way we practice"--and to "resolve the differences that divide us." He noted that new lines of communication--dialogue with students, interns and residents, open hearings, membership polls--have been opened within the AMA and urged members "to use them to develop a new sense of unity." He announced that he would spend the first weeks of his presidency visiting England, Sweden and Russia to observe as a practicing physician the care these countries are delivering. "I want to see what they are doing that might be of advantage to our system and perhaps offer some of our knowledge to them," he said. He will also review health problems in the U.S., and he said he would report his findings promptly to physicians and the public.

The 1972 opinion survey of the AMA membership was presented to the delegates attending the San Francisco meeting and attracted considerable interest as part of an effort of the AMA to become more responsive to its membership. The results of the poll have been presented in the AMA News and other AMA publications, but essentially indicated a sentiment on the part of the practicing physicians of the country to continue in the fee-for-service by the practitioner. It was of some interest that the poll conducted by the AMA did include a fairly large number of practicing physicians who are not AMA members and in general the opinions expressed by the non-AMA members and the AMA members were in accord. A random sample consisting of about 4500 practicing physicians both among members and non-members was analyzed separately. The results of this small random sampling were again about the same as the larger poll involving some 175,000 practicing physicians. The results of this random sample seem to indicate that for the future opinion surveys which are valid can be obtained by this method at considerably less expense than polls involving practically the entire number of practicing physicians in the country. It is anticipated that further such surveys will be used as a tool for the future by the AMA in determining its policies and in maintaining contact with the practicing physicians of the country.

A new family practice residency will be established in Durham as a cooperative program between the Duke Medical Center and the Watts Hospital. The Director of the new program will be Dr. Lyndon K. Jordan, general practitioner in Smithfield for many years. It will consist of a 3-year program with enough flexibility in its format to allow adaption by the trainees to the type of practice which they intend to have in later years. The first residents will

include Dr. Douglas Lloyd who is newly elected Vice-Chairman of the American Medical Association's Section on Interns and Residents, Dr. Clem Lucas, former SAMA officer, former staff member for Dr. Marc J. Musser, Medical Director of the Veterans Administration, Dr. Lacy Colson, graduate of Howard University Medical School, and Dr. Anne Moore, graduate of the Duke University Medical School.

The Officers and Headquarters Staff of the North Carolina Medical Society are glad to announce that Mrs. LaRue King, Assistant to the Executive Director of the Headquarters Staff, has just been named Business Woman of the Year in Raleigh. Congratulations to Mrs. King for this fine honor!

Also of interest on the local state scene is the fact that the option to buy the property owned by the N. C. Medical Society on the Durham-Raleigh Highway has been taken up by a second purchaser as of June 12. The initial deposit on this purchase has been received by the Medical Society.

The Venereal Disease Control Section of the Division of Epidemiology, State of North Carolina Department of Human Resources, is cranking up for a renewed assault on venereal disease in our state. Toward this end, a very productive Conference on Venereal Disease was held on June 3 and 4 involving staff members of the State Board of Health, many practicing physicians and Medical Society representatives. Featured speakers were Dr. Sam Nixon, member of the National Commission on Venereal Disease from Floresville, Texas, and Dr. Richard Allison of Columbia, South Carolina, Consultant in the South Carolina venereal disease control program. A new development in the control of both syphilis and gonorrhea by means of vaccines was discussed, and the research going on in this area was reviewed. It was felt that the future of venereal disease control probably rests in vaccination rather than in case finding and treatment.

Mr. William Hilliard, Executive Director of the Society, has announced the resignation of Mr. Bryant Paris of the Headquarters Staff as of June 12. Mr. Paris, who has been concerned primarily with the legislative activities of the Society, has accepted an administrative position with a Raleigh law firm.

A Committee on the Medical Aspects of Sports remains active and has just completed an annual North Carolina symposium on sports medicine at the Blockade Runner Hotel in Wrightsville Beach. The committee will sponsor, with Governor Scott, a Governor's Conference on the medical aspects of sports in Greensboro, N. C. on August 3.

The Committee on Public Relations under Dr. John McCain will sponsor in conjunction with the N. C. Regional Medical Program a conference addressing itself to the problems of access to medical care for the citizens of North Carolina. This conference will be held at the Quail Roost Conference Center here in Durham on September 9 and 10 and will hopefully be the basis for publication of an informational booklet on problems of access which will be available for county societies and for members of the state society.

Sincerely and with best wishes,



John Glasson, M. D.

Message of the President to the House of Delegates

Charles W. Styron, M.D.

BY custom the retiring President reports to the House of Delegates at its annual meeting on the activities of the Medical Society during the past year. It is my privilege to give a partial summary of events with some expressions of the effect that events generate.

On October 10, 1971, the Headquarters Building was dedicated with the Honorable Robert W. Scott, Governor of North Carolina as the featured speaker. About 300 members and guests participated, and the program was appropriately designed for the occasion. The building was completed under the direction of Hewitt Rose, M.D., and the Building Committee, and was designed by the outstanding architect, Milton Small, A.I.A.

The Headquarters Building is functionally planned and well appointed. It is extensively used for both Headquarters and Society functions. Many government commissions, committees, and agencies have used the building this year because of the excellent facilities and convenient, adequate parking. I believe that the unexpected turn of events in the use of this physical asset of the Society has overtones in accomplishment of purpose for us. The Society is proud of its new home, and the House of Delegates, together with the membership at large, are to be congratulated on this accomplishment. I hope you will use the building on every possible occasion.

Under the able direction of Mr. William Hilliard, the Headquarters staff has functioned smoothly and well. The Rothrock, Reynolds, and Reynolds survey on the recommendation of Blue Ribbon Committee No. 1 was completed in August of 1969, and shortly

thereafter efforts were made to carry out these recommendations. Changes are still being made to effectuate fully each item in this report. During this year long management conferences were held with Mr. Gerard Frawley of Miami, formerly a member of the Rothrock firm, in accordance with the direction of the Council that such conferences continue to be held periodically. In my view, Mr. Frawley's consultations with us were informative, instructive, and effective, and I believe that Mr. Hilliard concurs. Continued periodic consultation is recommended as worthwhile. By this means, current needs will be met as they arise.

Recently an additional field representative, Mr. Stephen Morrisette, has been employed by the Medical Society, as authorized. This new appointment will enable the Society to improve its relationships with county societies, committees, and individual members who have constant need for counsel with the State Medical Society.

It is apparent to me that we have an excellent Headquarters staff, who pursue vigorously their work in meeting our aims and objectives.

Fortunately at the beginning of this term of office the commissioners and committee appointments were complete, thus enabling us to hold scheduled meetings in the early summer and to publish the special Roster edition in September, 1971, three months earlier than usual. I believe that such early planning is a useful undertaking for the President-Elect, and I recommend it as standard operating procedure. I am grateful to know that early planning has been done again this year by our incoming President, John Glasston.

The activity for the Society year is generated primarily in three ways as follows: (1) continuation of

Read before the House of Delegates, North Carolina Medical Society, Pinehurst, May 21, 1972.
Request for reprints to 615 St. Mary's Street, Raleigh, N. C. 27605.

unfinished business, (2) demand for action or exploration in areas of interest because of the need, and (3) the President's program. The President's program is in part innovative and in part reaction to interests of the officers, Council, committees, and the House of Delegates. Events of the times, particularly political activity, will dictate to a large degree our points of interest. It is appropriate that the members recognize issues as they arise or problems that are likely to occur so that early action can be taken.

The projected major program for the year now ending embraced five subjects as follows: delivery of medical care, medical education, research, medical costs, and third parties. I shall mention some of these briefly and expand on them at another time.

DELIVERY OF MEDICAL CARE

Delivery of medical care was explored fully, principally by the new Committee on Health Care Delivery chaired by Patrick Kenan, M.D. Initial explorations were carried out by attending discussions with the Long-Range Planning Committee of Durham-Orange County. It was felt that as much available information as possible should be accumulated by the Committee for study. In order to effect this ambition partially, the Medical Society arranged a trip to California where foundations and health-maintenance-like organizations were studied. The Society was represented by Patrick Kenan, the Committee chairman, and Kenneth Cosgrove, first vice-president, and other persons who, though not medical doctors, were engaged in health care delivery activities. Information accumulated in detail by this task force was then studied by the Committee at large. In December of 1971, an excellent symposium was held in Greensboro and attended, in severe weather, by 72 members and interested guests. The physician registrants had an opportunity to hear and to talk to planners who had studied new mechanisms of practice. The meeting was provocative and, I believe, very helpful to physicians — who, incidentally, did not like everything that was said. But this symposium has stimulated interest and further study by some Society members.

As a result the Society is now a repository of information on mechanisms for health care delivery and is in a position to advise members or groups of members in regard to these matters.

MEDICAL EDUCATION

In the area of medical education, numerous programs have been carried out by the Society and in cooperation with the North Carolina Regional Medical Program. There have been programs related to clinical medicine and practice problems. Methods of practice management have been offered on several occasions.

THIRD PARTIES

Problems involving the third parties have resulted in increased interest in peer review of quality, access, and cost. As a result we have held numerous conferences among ourselves and with representatives of the insurance industry and government in attempts to solve issues that bear on this matter. For example, we were deeply disturbed to learn through the press that the North Carolina Department of Social Services had terminated its contract with North Carolina Blue Cross and Blue Shield as fiscal intermediary for the Medicaid program. In a meeting of the Executive Committee with representatives of the Department of Social Services and the Corporation, this dilemma was discussed in detail. It was pointed out that the Medical Society was active with the Corporation both in its board and with the Blue Shield Committee. We discussed the difficulties that would arise were we to lose our methods of communication with the Corporation in peer review, consultation, and field representation. Within a ten-day period Commissioner Craig of the Department of Social Services arranged further conferences and the contract was renegotiated. This department of the state government has been most cooperative with us this year.

We have tried to emphasize to third parties the need for solving practice matters within the Society without outside intervention. Thus we have expanded our peer review functions. At the present time we look forward to early discussions in the Peer Review Committee that will increase our influence.

Medicaid has continued to be a source of frequent complaint. Title XIX operates under a contract between the Department of Social Services and North Carolina Blue Cross and Blue Shield, as mentioned above. This year I talked to a member of the Committee that is currently working on a new contract in hopes of pointing out areas of difficulty. Traditionally such programs are overpromised and underfunded, resulting in unusual concern on the part of the carrier and the Department of Social Services with utilization and cost. As a consequence of this state of affairs, Blue Cross and Blue Shield have adhered closely to *their interpretation* of what the practice of medicine should be. Because of many complaints by physicians about rulings in regard to practice, meetings have been held in an attempt to improve these relationships.

Recently there appeared in the mail a contract to be signed by physicians for participation in the Medicaid program. It became immediately apparent that physicians would not sign such a participating agreement, or would do so reluctantly. After a long discussion with the Department of Social Services and with representatives of Blue Cross and Blue Shield it was agreed that this matter could be handled on an individual basis by means of the claim form signature. This matter and recommendation will come

before the House of Delegates at the present session.

Early in the year, when Medicaid announced a new policy for prior approval of certain operations, negotiations with the Department of Social Services were immediately undertaken. We were able to withdraw such prior approval in a short period of time.

It does appear, however, that third party pressures will continue; therefore it is necessary that we have the mechanisms within the Society through our various committees to solve the issues as they arise. Indeed, to a very large degree these mechanisms are in operation, and they do work effectively.

NURSE PRACTITIONERS

Since last fall a joint committee of the Medical Society and the Nursing Association has met frequently to discuss the extended role of the nurse in medical practice. The purpose of these meetings was to determine how a family nurse practitioner should be employed in medical practice, and what particular supervision is necessary. Although family nurse practitioners are being employed in this state, they are not currently certified. A resolution will come before the House at this meeting in regard to the certification of nurses in their expanded role of practitioner. This resolution appropriately came from the Committee on Nursing. I hope many of you will be able to attend the Reference Committee discussion on this resolution, since there are indeed problems with which the Medical Society should concern itself in this area. This Committee will continue to meet, and I believe firmly that any position we take should be supported by the parent organizations.

COMMUNITY MEDICAL ASSISTANCE

This year I have served as chairman of the Governor's Committee on Community Medical Assistance. This Committee is staffed by the Office of Comprehensive Health Planning of the state. It has received numerous requests for aid in the form of physicians or advice on how to obtain physicians in the small community and rural setting. The Committee has explored the topic thoroughly and has had site visits to consult with interested parties on the local scene. The educational value of the Committee to the communities is apparent and we hope to do more through a variety of mechanisms.

STUDENT MEMBERS

As you know, student members of the Society are now admitted through their student AMA chapters. The cost per year per student was reduced to \$3.00 for full membership, and student chapters will be represented in the House of Delegates. Thus far Duke University School of Medicine has the largest number of members. We hope that the low cost and opportunity for full membership will result in increased applications and increased activity generally

by the student members. We think that this introduction to the Society is very important for the undergraduate.

The Medical Society was asked to study the SBI report on Cherry Hospital. Mr. Hilliard and I examined the report closely and could not determine unprofessional or illegal conduct on the part of any Society member. Since there were other problems in mental health during the year, I suggested to the chairman of the Committee on Mental Health, Philip Nelson, M.D., that a subcommittee on legislation in mental health be formed to work in and through the Committee on Legislation. This will be done.

Because of mutual interests on the hospital scene, the Hospital and Professional Relations Committee and the Committee on Public Relations arranged a symposium with the North Carolina Hospital Association on the day before the mid-winter conference. Hospital administrators and our members heard formal addresses and roundtable discussions. This was a very informative session, and I hope it will be useful as an annual event. John McCain, M.D., Joseph VanHoy, M.D., and Ernest Page, M.D., were responsible for these arrangements.

This meeting was followed the next day by the mid-winter conference for medical leadership, heavily attended. There were so many concurrent meetings that it was impossible to attend all of the interesting programs. I believe it was our best meeting of this type.

There were many other events of importance to the Society. I regret that I was unable to attend many important functions among the committees and county societies—but it was impossible to do everything that I wanted to do. On occasions, as many as seven or eight committee meetings or other functions were attended in a single week. There was little time left for alternatives.

COMMUNICATIONS

During the year I believe that I have answered, or had answered, every letter that came to my attention—if it appeared that a reply was necessary. There may have been an oversight; if so, it was unintentional.

This then brings up the question of communications. Great effort is expended by the Society in reaching the membership by means of the JOURNAL, Newsletter, Public Relations Bulletin and mailings, and through committees, councilors, officers, and county societies and their publications. During a year many programs are designed with communications in mind, and most of all the annual meeting. The compilation of annual reports is available for everyone. But communication, like the telephone, must be active in both directions. The Society needs the interest and support of its members more than it needs anything else, and the membership needs the

Society. With such an arrangement our influence will be great.

The Medical Society is held in high esteem by government and its various department, by many members of the General Assembly, by our officials in Washington, and by educational institutions and centers. They are hungry for our point of view, advice, and counsel. And so we must continue to improve as the one organization that represents doctors in all areas and in all specialties of North Carolina.

Now, in regard to communications I must mention the press and other media—the radio and television. On many occasions I was asked to express an opinion, to respond to issues, to state the Medical Society's position. This was difficult for me at first because at times I did not have all the information that was needed. But respond I did by telling what I knew truthfully. On a few occasions I explained to a journalist certain matters that were off the record. This worked well — a confidence was never disregarded and I was never misquoted. Perhaps I

am naive, but on the other hand, perhaps this is the way to operate.

THE AUXILIARY

Now I must commend the Auxiliary and its President, Mrs. Ruby Byrum, for their support throughout the year. Mrs. Byrum has held the chair gracefully and has expanded great energy in making her term successful. The Society and the Auxiliary are proud to have had her for this important year.

CONCLUSION

Finally, it has been a privilege to work for our Society with its 650 committee and board members, with the officers and councilors, with the Headquarters personnel and the membership. Not a member, not one, has given me an uneasy or unpleasant moment. For this I am grateful. My thanks and appreciation go to all for your help in this interesting, exciting, and, I hope, productive term. You have all been most generous to me. May I say that it has been a pleasure in every way to have had the honor of serving as your President this year.

Another thing very hurtful to females about [menarche] is strait clothes. They are fond of a fine shape, and foolishly imagine this can be acquired by lacing themselves tight. Hence, by squeezing the stomach and bowels, they hurt the digestion, and occasion many incurable maladies. This error is not indeed so common as it has been; but, as fashions change, it may come about again: many females, to this day, feel the direful effects of that wretched custom which prevailed some years ago, of squeezing every girl into a small a size in the middle as possible. Human invention could not possibly have devised a practice more destructive to health.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 357.*

The Medical Society, the Doctor, and the Patient

Charles W. Styron, M.D.

ONE cannot serve as President of the Medical Society without the development and expansion of ideas that bear on the Society's value to its purpose and to its members. The multiple activities of the Society vary in emphasis from year to year. At the same time there is a thread of continuity that relates one year to the next.

This year our most important emphasis has been on the delivery of medical care and problems related thereto; for example, the nature of practice, the changing patterns of practice, practice access, quality, and cost, and the burgeoning interest, interference, and effect of third parties. For some time to come we shall be engaged in negotiations in the name of medical practice.

If the Medical Society is to influence medicine properly in the future, certain basic needs must be met. We need good physical facilities, which we have; we need an energetic and knowledgeable staff, which we have; we need an intelligent, interested, and working membership, which we have; but the need for improvement in membership activity is essential.

The life-sustaining forces of our Medical Society are desire, interest, energy, and communication. Since there are no secrets in the Society it is desirable that every member be informed of every activity. This is apparently impossible and obviously far from the case.

The means by which the Medical Society communicates with the members was discussed in detail in the message to the House of Delegates. Our methods of communication must improve and I believe that progress is being made in this area. I mentioned that communication must grow in both direc-

tions and that if the member is to be informed he must have the desire and interest to become so. If a member is not interested in the activities of the Medical Society he should place his reliance in his counselor, committee members, and delegates to this House.

Now I mention these matters because, in my opinion, it is difficult for an individual member or small groups of members to have a significant effect on the future course of medicine. I believe firmly, however, that doctors collectively, in their societies, can indeed have a profound effect on medicine in the future as in fact they have in the past. For example, in 1949, when the Truman administration attempted to force major changes in medical practice, the efforts of the American Medical Association were taken so seriously that no major change occurred until Medicare became a reality in 1965.

I am afraid that some doctors are unaware of the influence that our Medical Society has. The Society is highly regarded by government, by agencies, organizations, and educational institutions. We are called on with great frequency to consult and to advise on many issues in the health fields that arise in state government, and our position is taken seriously by responsible officials in all areas. We must recognize that other nonmedical organizations also have influence, and that we cannot expect to have our way as we would like to have it all the time.

It is necessary as members of this Society to be knowledgeable, know what we believe, have a basic philosophy on issues, and represent ourselves with dignity, force, and excellence. As we do this, our position and influence as spokesmen for medicine in North Carolina will improve.

Our counsel and dissent must have a platform from which to speak. I believe that collective medical socie-

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ties of all kinds are in a position to do this well, but none with greater representation than the various state medical societies.

Reform seems to be the order of the day. Is the criticism of medicine a product of time and history where all society seems disturbed about the validity and usefulness of its institutions — our church, our schools, our varied state governments and their constitutions, and medicine? Is the cry that we hear an emotional response to social problems with insistence on hasty and ill-advised solutions said to be the answer by many of our political leaders? Is there a satisfactory answer to a society that inflicts upon itself 50,000 automobile deaths a year, more than 21,000 murders a year, increasing and almost uncontrollable drug problems, thousands of accidents with home machinery, increasing alcoholism, excessive smoking, and failure to follow the health rules that would diminish and perhaps eradicate debilitating results of some disease processes? Are our opponents shooting from the hip? Are the programs actually well designed? Will they work? Do the congressional supporters of the alternatives fully understand the implications of their position on health issues?

For example, at the winter AMPAC meeting in Washington a United States senator and representative were part of a roundtable discussion on health issues. On several occasions fundamental but simple questions were asked of them and each time these public officials refused to answer the question because it was not in their field of competence. Yet these same men are going to vote on issues that are overwhelmingly complex and costly.

Is there anything we can do? I believe there is a great deal—but first we must have a sound basis for discussion. It is not enough to be against the whole panorama of medical plans of the day. We must be specific to obtain an audience. And this has been the basis of our Medical Society discussions with government this year.

For a few minutes I wish to present some thoughts that need development in the Society because of their bearing on medical practices in the future.

There is no doubt whatever that difficult access to the health system and the high cost related thereto have been the principal causes of the general clamor for change, even amongst those who like the system that we have. The most common question asked of me this year has been, "Where can I get a doctor?" And though costs have been a prime target, they have not impeded the public concern for access. Quality has been mentioned, particularly in third party or government programs, but quality has not been a major concern, since indeed practice has improved historically year by year.

Since 1950 when concern about access to medical care was first heard significantly, doctors have increased in relative numbers more rapidly than has

population growth. Recently Dr. Wesley Hall, President of the AMA, pointed out, "It is important to note that physician population has met or surpassed every projective physician manpower need since such forecasts have been made" (Federation Bulletin 9:135, 1972). The need for physicians is in large degree due to unsatisfactory distribution, but it also affected by change in the doctor's orientation and interest in areas of medicine, and to variations in population patterns. There has been a significant alteration in the demand for medical service by government, industry, and research; however many doctors we produce, it is unlikely that appropriate distribution of medical manpower will occur in the near future. It is here that the state and federal government have become interested in new mechanisms for health care in rural areas and the deprived sections of cities. For example, just three days ago I read that Soul City developers had asked the Office of Economic Opportunity for a grant of more than a million dollars to build and equip the Soul City complex and to hire doctors, nurses, and allied medical personnel. Plans have been made in Raleigh for a similar development. As you know, the AMA is on record as recommending pluralistic approaches to medical care problems.

One hears that enormous changes have occurred in medical practice in the past decade. This is true, but the changes are scientific principally, and not related to government control. Government and third party pressures have obviously become a nuisance, and there seems no relief from this situation.

Why do I say this? Because thus far in this country emphasis has been placed on methods of financing medical care in the form of health insurance such as Medicare and Medicaid, and currently on catastrophic illness and National Health Insurance. There has been no emphasis on a National Health Service as exemplified in the British system. As a result of this emphasis, the practice of medicine and the doctor-patient relationship have not been greatly disturbed. The doctor still practices medicine as usual despite his concern with government and the third party.

New mechanisms for practice are brought forward by planners and a small segment of our doctors, often from medical centers where matters of practice such as we have mentioned here are not a problem. Group practice is popular in this country and becoming more so. Hospital-based practices are common in educational centers and large cities. In fact cooperative practice is a necessity in certain specialties—cardiovascular surgery, for example.

The present administration has been under sharp criticism for its sanction of 110 HMO planning and development grants under HEW without specific legislative authority. The secretary of HEW stated that this program constituted research and was allowable. The secretary stated further that by 1980 the administration expects to have 1210 HMO's op-

erating and that the entire population of the United States should have the option of enrolling in one of these groups. Our member and current vice-chairman of the board of trustees of the AMA told me that in a short period of time he asked HEW officials for a definition of HMO and on seven occasions got seven different answers.

As nearly as I have determined, an HMO is a corporation that requires large sums of money to organize and activate, that hires and fires doctors, and that may be incorporated by nonprofessionals for profit; a corporation that is usually financed by prepayment without fee for service. North Carolina medicine has rejected this type of HMO in principal by written statements to Congress from the Joint Conference Committee on Medical Care. To say the least, these statements on HMO should be further warning of what can occur without legislation, so that a substantial part of the administration's National Health Insurance Partnership Act becomes a fact whether we want it or not.

In the study of a bill for HMO's, I was surprised to see the bill replete with the statement "as the Secretary shall direct." I believe the statement meant what it said.

As you know, a popular alternative for HMO has developed, The Foundation for Medical Care, which does or can meet all the necessary criteria, with internal controls on the quality and economics of practice. I believe such a mechanism deserves interest by the Society. In fact the development of a foundation for quality is under way, but the bylaws can easily be expanded to accommodate a complete foundation. The great advantage of the foundation is the accommodation of the best mechanisms for practice that we have now.

You are all aware of the great debates we have had this year about the third party. There are obviously undesirable and annoying practices of the third party which we have discussed before. Assignment is obviously a mechanism to exert *further control* on the economics of medical practice. No employer of the system has been able to show me otherwise. Fortunately the regulation is voluntary. The mechanism of payment is difficult for patients and even the medical profession to understand. I believe the present rules of assignment should be changed. At present none would concede that the mechanism is fair to all parties.

Claim forms are changing so that the very signature may open the door to the charge of fraud or illegal practice if an honest error is made. No busy doctor can sit down to a stack of 20 or so records at the end of the day and sign the claim form with absolute certainty that the figures on these forms are correct. He could not do so without checking hospital and office records and charges, a tedious and time consuming job. Yet he will be expected to do exactly this.

Recently certain insurance carriers have informed patients that reasonable fees would be determined by the insurance industry, and that if the physician's charges were more than the company allowed, the company would in turn pay the patient's legal expense for unfavorable court action. Medical Society representatives pointed out that such determinations and practices by any insurance company constitute negotiations for physician services without the participation or acceptance by the physician, and that physicians will not accept such practice by a private carrier. It was pointed out that any fee determination will be made by the doctor and the patient, and not by the third party. This afternoon the House of Delegates will vote on this matter in a resolution, and there is no doubt that the Society will voice its opposition to this projected practice by carriers. We believe that we should mediate any differences by our own peer and claims review mechanisms.

A problem has arisen in utilization review by committees removed from the scene of the hospital or health care facility. I have spoken on this matter several times. It is a fact that proper utilization cannot be made *after the fact* by committees who work from diagnoses and discharge summaries. This becomes evident when members of a review committee disagree sharply on a particular case. Utilization review will be done, but in my opinion it can be done accurately only on site, at the time, and with the individuals involved at hand for consultation — namely doctors, nurses, and the local utilization review committee. This means that local utilization review must be developed properly and used properly. This will answer the problem of after the fact and third party utilization. Please take this suggestion seriously.

The problem of access must be solved. To some degree solutions have appeared, but attempts must be made to reach fully that segment of our population which has insufficient health care. Increasing the supply of doctors alone will not solve the issue. In seeking solutions, reduction in the quality of medical education should not be tolerated. It is true that the process of education for the doctor is long, hard, tedious, and expensive. At the same time, there are only half enough places to satisfy requests for admission to our medical schools. By and large, the complaints about the time involved in medical education come not from the medical profession but from those nonprofessionals who are interested in health affairs. The profession is proud of its quality and should look carefully at any method of medical education that would shorten time at expense of excellence. Dr. Charles Hoffman, AMA President-Elect, spoke on this matter yesterday. He emphasized the need for maturity in medical practice, and the unique responsibility for life and death that becomes a part of our lives. We have — all of us — seen the poorly trained and inadequate doctor. This

constitutes a disaster wherever it occurs. I hope that the educational forces in medicine will not yield to public and political pressures on these points.

I have mentioned just a few of the issues which have engaged our time this year and issues which will become even more important in the future. It is unfortunate that doctors must spend much valuable time in affecting the course of medicine when there is so much to do in caring for our patients, but we must do so. Just this morning a young doctor said to me—with some delight, I thought—"In ten years we won't recognize the medical profession as it is today, and the first steps have been made in educating the public" (brainwashing should have been the word). And it seemed to me that he made this statement with pleasant anticipation. I thought at the time that if he had had any experience whatsoever, in the practice of medicine, he would not look for-

ward eagerly to changes from one system, of which he knows little, to another of which we know hardly anything at all.

Now the time has come when I must make my final declaration to the Medical Society as your President. How can I express fully my warm feeling of gratitude at this moment for the many hours given by the membership and staff in my behalf this year? Because of this support the year has not been difficult, nor has it been burdensome; but it has been exciting and rewarding. You have made this possible and I will not forget it.

To my good friend, John Glasson, I wish great success and equal happiness. No doubt he will achieve both.

Serving our Society as President is indeed an honor—and for this I thank you.

Youth is the season for mirth and cheerfulness. Let it therefore be indulged. It is an absolute duty. To lay in a stock of health in time of youth, is as necessary a piece of prudence as to make provision against the decays of old age. While wife Nature prompts the happy youth to join in sprightly amusements, let not the severe dictates of hoary age forbid the usual impulse, nor damp, with serious gloom, the season destined to mirth and innocent festivity.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 357.*

Drinking-Water Lithium and Mental Hospital Admission in North Carolina

A. Wouter Voors, M.D., Dr. P.H.

DAWSON and co-workers¹ have found an inverse correlation between the rate of admissions to mental hospitals and the level of lithium in the drinking water in various counties of the State of Texas. Water lithium levels ranged from 0 to 0.16 mg of ionic lithium per liter. The higher levels coincided with a marked shortage of rainfall. The investigators concluded that this finding supports the preventive influence of naturally occurring lithium on mental disease.

Lithium is widely used for abating the manic phase of manic-depressive psychosis. It also seems capable of preventing the manic as well as the depressive phases of this disease.² The usual maintenance dosage is around 150 mg per day.

It is difficult to obtain from the literature an estimate of the average daily lithium intake in a natural human diet. Bowen,³ for instance, cites a daily intake of 2 mg. More recent investigations, however, point to a daily resorption of only 0.02-0.07 mg.

Although usually most of the resorbed lithium is excreted via the kidneys within hours or days, evidence of some accumulation of the substance in certain human or other vertebrate tissues without preceding lithium medication has been repeatedly reported.^{5, 6} Milk, uterus, thyroid, midbrain, and pancreas are said to contain concentrations of lithium several times the level in other tissues (up to 0.1-0.5 mg of ionic lithium per kilogram of wet tissue in the former versus an average of 0.01 mg/kg in the latter). On the other hand, autopsies on lithium-treated patients have revealed concentrations of 0.15-0.65 mg/kg in the brain.⁷

The foregoing quantitative considerations have to be viewed with reservations concerning the validity of early publications which suffered from the limita-

tions of an imperfect technology. What emerges is a considerable gap between the clinical dosage observed to be beneficial (150 mg of ionic lithium per day) and the probable "natural" daily dosage, which is unlikely to exceed 0.5 mg even in high water-lithium areas. Since lithium is believed to interfere with central neural adrenergic transmission, some accumulation of lithium in the organs determining adrenergic stimulation (see above) could help to bridge this quantitative gap.

Finally it is possible that the intake of lithium in local drink and food by individuals having frequent contact with each other in a community may have a heightened biological effect in lower dosage than when the agent is administered to an isolated patient. It is known that certain (false) central neurotransmitter substances or their determinants exhibit so-called group toxicity whereby their action on group vertebrates is more intense than their action on individuals in isolation.⁸⁻¹⁰ Conversely, a certain minor but contagious aggressiveness or competitiveness among neighboring and interacting people of any geographical area could be susceptible to a smaller amount of lithium than when this element is administered to an isolated manic-depressive patient.

In conclusion, Dawson's stated implication of his findings is within the realm of possibilities perceived today, and needs to be replicated. The present study was designed to reproduce this investigation for the State of North Carolina. North Carolina seems suitable for this purpose because it has a range of water lithium levels equally broad as that of Texas, although it lacks a corresponding gradient in rainfall.

METHODS AND MATERIALS

An attempt has been made in the present study to follow Dawson's methodology as closely as feasible.

From the Department of Epidemiology, University of North Carolina School of Public Health, Chapel Hill, N. C. 27514.

Table 1

Product-Moment Coefficient of Correlation Between Certain Log-Transformed Mineral Levels: Municipal Water Supplies of 100 Largest U.S. Cities, 1962.*

	Potassium	Water Hardness (CaCO ₃)
Lithium	.748	.552
Potassium		.567

* Durfor, C. N. and Becker, E.: Public Water Supplies of the 100 Largest Cities in the U.S., 1962. Geological Water Supply Paper 1812. Washington, D. C., Government Printing Office, 1964.

Lithium index

Instead of direct assessment of the lithium level in the drinking water, an index was used—namely, the product of the concentration of potassium and the calcium carbonate (hardness) of the water. The rationale for this procedure is as follows: A chemical relationship exists between sodium, potassium, and lithium which is reflected in the vertebrate organism. Vinogradov¹¹ stated that in the podzolic soils of Russia the distribution of lithium parallels the distribution of potassium. He wrote that for all Russian soils investigated, the lithium content varied within narrow limits, thus strengthening his belief that lithium in the biosphere is more closely connected with the history of potassium than with the history of sodium. Likewise, in the drinking water of the 100 largest cities in the United States, the potassium and lithium levels have a product-moment correlation coefficient of 0.748 (Table 1). In North Carolina, however, where both the lithium and potassium levels of 345 water sources have been reported,¹² the correlation coefficient is only 0.486 (Table 2). In order to improve the prediction, the hardness of the water was incorporated into the index. In the 345 North Carolina water sources reported, hardness was more closely correlated with lithium than with potassium, and hence was assumed to increase the validity of the index. Because the data were approximately normally distributed, a logarithmic transformation was applied before the correlation was assessed, and in the index multiplication rather than addition was used.

The hardness and potassium levels of the drinking water of all North Carolina sources for which data had been published,^{12, 13} were weighted according to population usage for each county separately.¹⁴ For 52 counties not reported and 19 counties only partially reported, the original observation recordings were used.¹⁵ The product of the two values thus obtained was used as the lithium index.

Hospital admissions

Data on admissions to state mental hospitals were obtained from the North Carolina Department of Mental Health. These data were in the form of annual reports summarizing the annual admission rec-

Table 2

Product-Moment Coefficient of Correlation Between Certain Log-Transformed Mineral Levels. North Carolina Groundwater Sources*

	Potassium	Water Hardness (CaCO ₃)
Lithium	.486	.510
Potassium		.255

* North Carolina Department of Water and Air Resources, Division of Ground Water, Ground Water Bulletins, Numbers 1-18. 1960-1970. (345 observations)

ords of the state mental hospitals located at Raleigh, Morganton, Butner, and Goldsboro, and the state alcoholic rehabilitation centers at Morganton, Butner, and Greenville. Uniform reporting was available for the last five fiscal years—July 1, 1965 to July 1, 1970. All admissions to these hospitals and centers were itemized in the reports and classified as first admissions, readmissions, and all admission levels. They were also subdivided into major diagnostic categories: psychosis, neurosis, personality disorders, and a number of minor categories.

The absolute number of admissions and the three diagnostic categories were converted into rates of admission and diagnosis. Each absolute value was divided by the population of the county as calculated for the appropriate time period based on the 1960¹⁶ and 1970¹⁷ census. All rates were converted to a common population base rate per 1,000 population.

To group the counties according to lithium levels, Dawson's cut-off points were not replicated, because rainfall is approximately equal and fairly heavy over all North Carolina. It follows that, in all likelihood, any given high water-lithium level in a dry Texas county would represent a higher human intake of lithium (as increased through excessive drinking and perspiration by human beings as well as by the animals and plants which subsequently serve as their local food) than would a similarly high water-lithium level in a North Carolina county. Instead, all 100 North Carolina counties were ranked according to the lithium index and divided into five groups, or quintiles. As in the Texas study, attention was focused on extreme groups. In North Carolina as in Texas, these extreme groups formed two fairly contiguous areas (Fig. 1), and moreover are similar in the degree of urbanization and isolation.

The Student-t test was used to determine the statistical significance of the difference in the mean rates of admission and diagnostic categories, comparing the extreme quintiles.

RESULTS

The concentration of lithium in the drinking waters in North Carolina as measured directly and reported¹²⁻¹⁵ ranged from zero to 0.85 mg per liter.¹²⁻¹⁵

The admission rates to state mental hospitals and

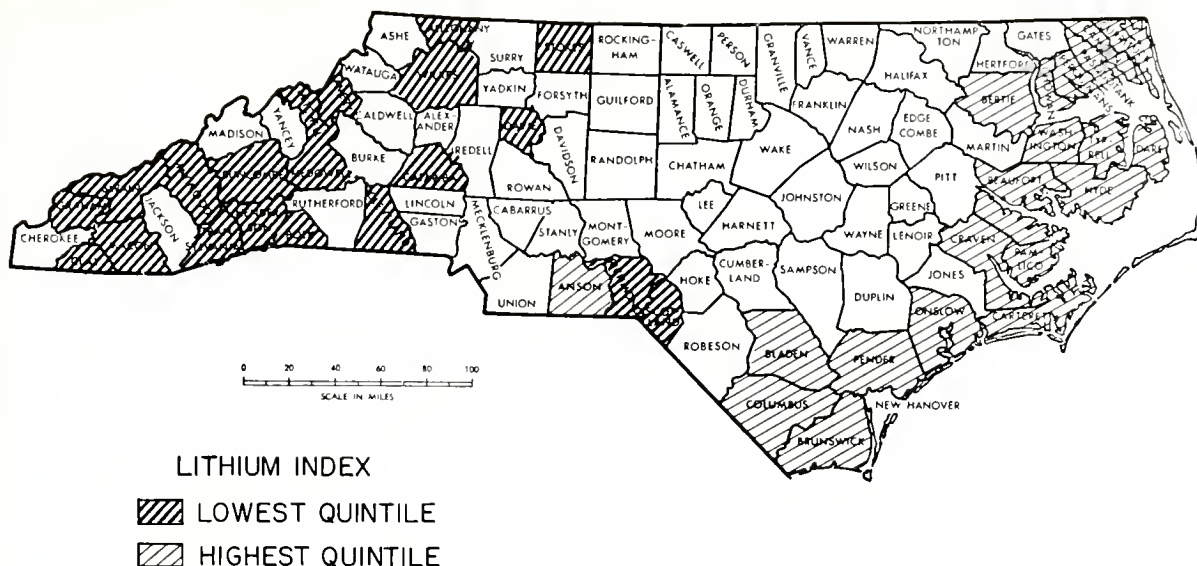


Fig. 1. Location of counties in lowest and highest quintile according to lithium level in the drinking water of North Carolina.

centers by county of residence are given in Table 3, in ascending order of the lithium index for the lowest and highest quintiles only. Included are (a) the rate of total admissions, regardless of diagnosis; (b) first admissions, and (c) readmissions for continuing treatment. The calculated population of each relevant county is included for reference. From these data the difference in mean admission rates between the extreme quintiles, although consistently in the same direction, were much less striking than the Texas findings. Likewise, the gradient in admission rates throughout the five lithium level quintiles was not monotonic as in the Texas data (Fig. 2). For the total admission rates, all intermediate quintiles were higher than the extremes, and for the first admission rates, the highest lithium quintiles had lower rates than all others, which showed no clear gradient.

The rates of admission by diagnostic categories were likewise examined (Table 4). Mean rates for psychosis differed slightly between the extreme quintiles, but, unlike the Texas data, in a direction opposite to the hypothesis. Mean rates for neurosis showed a clear difference in the hypothesized direction, and rates for personality disorders showed a slight difference in the hypothesized direction. The gradient in diagnostic rates over the five groups was monotonic only for the neuroses (Fig. 2). Personality defect rates were higher in the intermediate quintiles. The percentage of admission rates for psychosis varied least among the quintiles, but the pattern of variation was entirely independent of the lithium levels.

The analysis of the Student-t test for the extreme quintiles revealed no statistical significance except in the case of neurosis rates (Table 5).

INTERPRETATION OF THE RESULTS

The state's general hospitals have a combined total of only 210 beds for mental patients. Since the average length of stay in these hospitals varies from 13 to 33 days, the total number of patients admitted in a year is nearly half of the total of first admis-

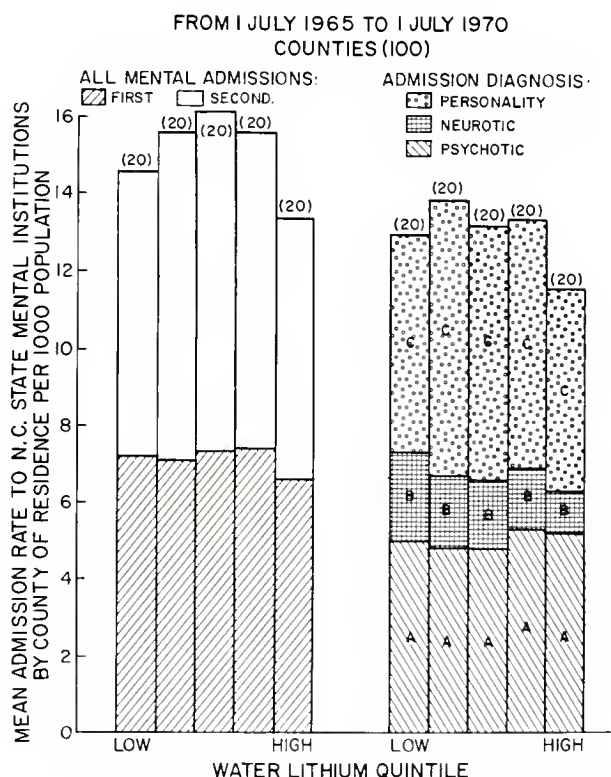


Fig. 2. Average rate of admission to North Carolina State Mental Hospitals and Centers in all 100 North Carolina counties, by quintile according to lithium level in the drinking water.

sions to state mental hospitals. In addition, some 3,000 North Carolina residents are treated annually for psychiatric disorders in Veterans Administration hospitals. Further, the total capacity of private mental hospitals in the state is probably around 250, as compared to some 9,400 patients residing in the four state and county mental hospitals.¹⁸

Nevertheless, the combined capacity of all state mental hospitals and centers is sufficient to insure that their patient load includes a broad cross-section of many forms of serious mental illness, in all age groups and ethnic and cultural backgrounds. The mental hospitals admitted 93.3 percent and the alcoholic rehabilitation centers 6.7 percent of the total case load.

The admission findings indicate that the statistical relationship between water lithium levels and mental

Table 3

State Mental Hospital and Center Admission Rates per County of Residence. Highest and Lowest Quintile According to Drinking Water Lithium Levels, in Ascending Order, From 1 July 1965 to 1 July 1970

Lithium Level, County	Populations* Thousands	Admissions per 1000 Population		
		All	First	Secondary
Lowest Quintile				
Buncombe	142	17.13	7.93	9.20
Polk	12	14.22	7.79	9.20
Graham	7	10.25	4.43	5.81
Scotland	27	13.75	7.32	6.42
Transylvania	19	15.37	8.16	7.21
Mitchell	14	15.15	8.35	6.80
Swain	8	18.73	9.18	9.56
Clay	5	13.93	5.34	8.59
Henderson	42	16.21	8.19	8.02
Richmond	40	11.72	6.64	5.08
Avery	13	18.18	9.01	9.17
McDowell	30	14.95	7.24	7.71
Macon	16	9.91	4.54	5.37
Alleghani	8	15.38	7.19	8.18
Stokes	24	11.43	4.93	6.50
Cleveland	71	14.46	7.52	7.74
Haywood	41	14.85	7.11	7.74
Davie	18	10.82	4.98	5.84
Wilkes	49	19.00	9.86	9.14
Catawba	88	16.02	8.37	7.64
mean:	34	14.57	7.20	7.37
Highest Quintile				
Anson	24	15.16	5.73	9.43
Columbus	47	12.16	6.41	5.75
Pender	18	15.15	7.69	7.47
Onslow	100	7.21	3.69	3.53
Bertie	21	14.01	6.46	7.55
Currituck	7	13.02	7.38	5.64
Craven	62	10.20	5.15	5.04
Dare	7	19.68	8.52	11.16
Bladen	27	13.16	6.84	6.32
Perquimans	8	12.12	6.12	6.00
Chowan	11	12.62	5.31	7.32
Pamlico	10	10.07	5.14	4.93
Beaufort	36	14.92	7.53	7.39
Carteret	31	16.71	8.77	7.94
Tyrrell	4	14.25	7.63	6.61
Pasquotank	27	14.99	6.61	8.38
Brunswick	24	14.36	6.97	7.39
Camden	5	9.86	6.39	3.47
Washington	14	11.83	5.67	6.17
Hyde	6	16.95	8.74	8.21
mean:	24	13.42	6.64	6.78

* Calculated from 1960 and 1970 Census Reports.

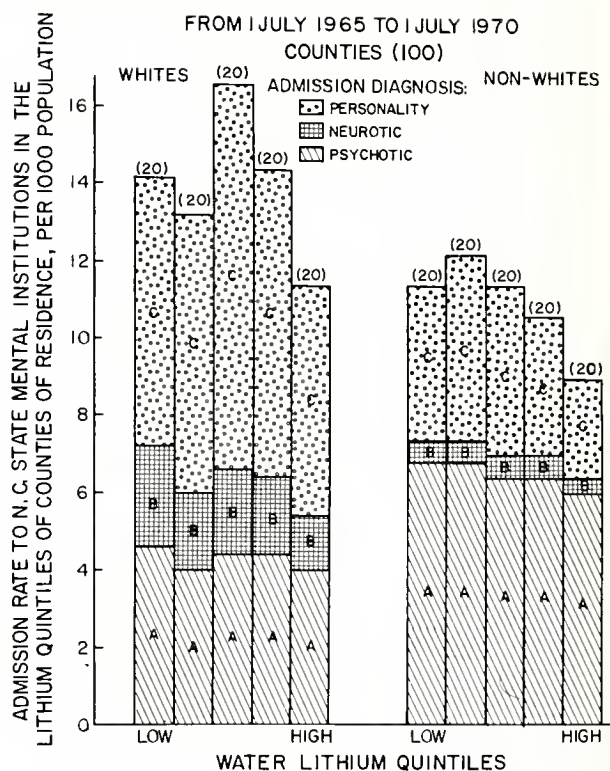


Fig. 3. Rates of admission to North Carolina State Mental Hospitals and Centers in the five water lithium quintiles, by major admission diagnosis and by racial group. One hundred counties of North Carolina.

hospital admissions in North Carolina is in the same direction as that found in Texas, but in North Carolina the magnitude of this relationship is much smaller and statistically insignificant.

It could be argued that observed differences in rates of admission to mental institutions are explainable by the racial composition of the five groups of counties. In the low lithium quintile nonwhites compose 11.9 percent of the population, and in the high lithium quintile, 30.5 percent, whereas admission rates of nonwhites in North Carolina are generally lower than those of whites (12.6 versus 15.8 percent). For this reason the admission rates by diagnosis were further subdivided by race. Since in 42 percent of the counties such rates were derived from less than ten nonwhite admissions, it was necessary to use quintiles rather than counties as the unit of study, and to derive rates from the combined population of the counties composing a quintile. The results, given in Figure 3, show that the gradient of diagnostic admission rates over the lithium quintiles is still present when the two racial groups are considered separately.

In a similar manner it was found that the admission gradient cannot be explained by any difference in the age composition between the quintiles. Of course, race and age do not exhaust the number of variables which could account for the observed difference, but more detailed analysis is beyond the

scope of this paper. This means that any conclusions drawn can be only suggestive.

It is difficult to interpret the finding in both the Texas and the North Carolina studies that admissions for neurosis are most strongly associated with the lithium level in drinking water. Neurosis severe enough to require hospital admission may have aggressive or depressive features related to the monoamine metabolism on which lithium supposedly exerts its influence. It is further possible that in areas of high lithium levels, the human environment acts more permissively on the marginal person with a predisposition to mental disease, whereas in low lithium areas the environment acts more aggressively. Considering neurosis as a milder form of mental illness, it follows that natural lithium intake would manifest itself primarily in such borderline states.

Table 4

State Mental Hospital and Center Diagnostic Rates per 1000 for Each County. Highest and Lowest Quintile According to Drinking Water Lithium Levels, in Ascending Order, From 1 July 1965 to 1 July 1970.

Lithium Level/County	Psychosis (A)	Neurosis (B)	Personality (C)	Combined (A+B+C)
Lowest Quintile				
Buncombe	5.32	2.19	8.05	15.56
Polk	5.31	2.48	5.48	13.27
Graham	3.21	1.84	4.28	9.33
Scotland	4.70	1.46	5.37	11.53
Transylvania	3.97	1.67	8.26	13.90
Mitchell	5.47	3.55	4.66	13.68
Swain	7.29	3.02	5.66	15.97
Clay	7.06	1.72	3.63	12.41
Henderson	4.97	2.59	6.96	14.52
Richmond	3.67	1.06	5.23	9.96
Avery	5.26	3.59	7.57	16.42
McDowell	3.94	2.80	6.94	13.68
Macon	4.92	2.11	2.05	9.08
Alleghani	6.70	1.98	4.71	13.39
Stokes	4.50	1.53	3.32	9.35
Cleveland	4.93	2.63	5.85	13.41
Haywood	3.68	3.07	6.50	13.25
Davie	4.22	1.14	4.38	9.74
Wilkes	5.15	2.64	9.88	17.67
Catawba	4.96	2.91	6.49	14.36
mean:	4.96	2.30	5.76	13.02
Highest Quintile				
Anson	6.57	1.22	5.90	13.69
Columbus	5.14	1.14	4.80	11.08
Pender	5.88	0.93	6.15	12.96
Onslow	2.62	0.62	2.84	6.08
Bertie	5.33	1.51	4.81	11.65
Currituck	4.92	1.30	5.06	11.28
Craven	3.65	0.82	4.38	8.85
Dare	7.20	0.73	7.78	15.71
Bladen	5.06	1.30	5.06	11.42
Perquimans	4.12	0.35	5.77	10.24
Chowan	5.58	1.83	4.30	11.71
Pamlico	3.99	1.15	3.99	9.13
Beaufort	5.28	1.31	6.28	12.87
Carteret	5.34	1.46	7.84	14.64
Tyrrell	4.83	1.78	5.85	12.46
Pasquotank	5.79	1.20	6.35	13.34
Brunswick	4.89	1.10	5.99	11.98
Camden	4.02	0.00	3.65	7.67
Washington	5.81	0.72	4.38	10.91
Hyde	7.31	1.61	5.17	14.09
mean:	5.16	1.10	5.31	11.57

Table 5

Results of Student-T Tests Comparing Mean Rates (per 1000) of Admission and Diagnosis Groups in Counties with Lowest and Highest Drinking Water Lithium

Group	Water Lithium Low	Quintile High	"t"	P
Admission:				
All	14.57±.60	13.42±.64*	1.31	< .10
First	7.20±.36	6.64±.30	1.22	n.s.†
Secondary	7.37±.30	6.78±.42	1.13	n.s.
Diagnosis:				
Psychosis	4.96±.24	5.16±.26	0.58	n.s.
Neurosis	2.30±.17	1.10±.10	6.08	< .0001
Personality	5.76±.42	5.31±.28	0.88	n.s.

* Mean ± s.e.m. per 1000 county population

† Statistically nonsignificant (P > 0.10)

CONCLUSION

The strong negative association between water lithium and mental hospital admissions rates found by Dawson and others in Texas could not be replicated in North Carolina, although here the relationship was generally in the same direction. In view of a number of differences in circumstances between the two studies, it is concluded that this finding does not contradict Dawson's finding, but can be construed as providing support for it.

The present study suggests the need for more sensitive instruments (for instance, an index of social disorganization such as that described for North Carolina by Smith), to add a new dimension to the measurement of mental health as presently gauged by rates of admission to mental hospitals. More sensitive measurements could further elucidate the function, if any, of low doses of lithium.

Acknowledgements

The following persons gave assistance in the study: Mr. R. C. Heath, U. S. Geological Survey, Raleigh, made unpublished water chemistry data available; Dr. H. A. Tyroler, Department of Epidemiology, School of Public Health, University of North Carolina gave helpful advice; Mrs. B. Dillard, North Carolina Department of Mental Health, Raleigh, provided the admission statistics; and Mrs. G. Johnson assisted in the bibliographical and computational work.

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Every woman who procures an abortion does it at the hazard of her life; yet there are not a few who run this risk, merely to prevent the trouble of bearing and bringing up children. It is surely a most unnatural crime, and cannot, even in the most abandoned, be viewed without horror; but in the decent matron, it is still more unpardonable. Those wretches who daily advertise their assistance to women in this business, deserve, in my opinion, the most severe of all human punishments.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 361.*

Editorials

ACCOMPLISHMENTS OF THE HOUSE OF DELEGATES

May, 1972

The House of Delegates met in Pinehurst, May 21-23, during the annual session of the Medical Society of the State of North Carolina. Much business was considered, debated, and transacted.

In an effort to provide the entire membership of the Society with a brief record of these actions, we have listed below the various items of business considered and the actions taken. Should readers desire further details, it is suggested that they contact their delegates, their county society officers, their counselor, or the officers and staff of the Society, as appears most appropriate.

Matters Directly Relating to the Society

1. Elected officers for 1972-73 (see page 582).
2. Changed the Society name to North Carolina Medical Society, by final ratification.
3. Adopted the revised Constitution and By-laws which include the recommended grammatical changes.
4. Endorsed the expansion of the role of the registered nurse as a nurse practitioner and insisted that such expansion be done *only* when the nurse practitioner has a clearly defined relationship to a licensed practicing physician(s) who bears medical responsibility for those parts of the nurse's role that go beyond the bounds of traditional nursing practice. Also recommended that the development of the nurse practitioner be accomplished under the supervision of a joint subcommittee of the Board of Medical Examiners and the Board of Nursing.
5. Changed the format of the annual meeting so that, as soon as practicable:
 - a. The Annual Meeting include two General Sessions instead of the present provision for at least one, and
 - b. The first meeting of the House of Delegates be held on Friday, the second on Sunday, with Reference Committee hearings on Saturday.
6. Accepted the annual budget estimates for 1972.
7. Approved the feasibility of the establishment of a statewide non-profit foundation for Peer Review of quality medical care.

8. Approved efforts for improvement of patient care.

9. Agreed to explore various methods of compulsory continuing medical education, with special reference to those methods being used in the State of Oregon.

10. Favored the concept that each local and regional planning council request that at least one official delegate be appointed from the local county medical society in that area or region to be a member of its executive committee, and pledged the use of the Society's office and expertise of its staff to help secure such representation on planning councils, and offered professional consultation to help planning agencies where this consultation is requested and could be feasibly rendered.

11. Requested the Board of Medical Examiners to mail first notification of the required biennial registration in November (instead of December), and requested that a final notice be mailed to those physicians not registered by January 1 with a reminder of the legal implications if registration is not completed by February 1.

Matters Relating to Society Policy

1. Expressed the opinion that no physician should participate in peer review of any case in which he has been a consultant, or has received, or is eligible to receive, remuneration from the third party payor.
2. Favored periodic physical examinations for all individuals with the frequency of such examinations being decided by the personal physician in consultation with his patient.

Recommended that Public Law No. 115-143 be repealed.

Recommended that pre-employment physical examinations be required of teachers and other personnel designated in PL115-143 at the time of their initial employment.

Recommended that annual screening for tuberculosis be required of such teachers and other personnel and that it be provided without cost to them through county health departments.
3. Supported the labelling of all prescription medications as prescribed unless the prescribing physician directs otherwise, and instructed the Legislative Committee of the Medical Society of North Carolina to

initiate development of legislation to implement this into law.

4. Supported a pluralistic health care delivery system, and the right of both patient and physician to choose the system in which they encounter each other, as long as that system exploits neither patient nor physician.

5. Adopted a statement of policy on drug abuse and drug dependency.

6. Adopted a policy on rubella immunization.

7. Requested that the members of the North Carolina Medical Society prescribe no amphetamines or methamphetamines for appetite control and that the use of these drugs be restricted to the treatment of those disorders which, in the opinion of the patient's physician, will be beneficial, and encouraged each county medical society to pass a similar resolution.

8. On abortion:

a. Went on record as considering an abortion to be an elective surgical procedure which should be performed only by a licensed physician.

b. Suggested that the decision to perform an abortion should be made by the pregnant woman and her physician.

c. Recommended that any physician whose personal beliefs are in conflict with the surgical interruption of a pregnancy should under no circumstances be required to perform an abortion.



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d. Approved the passage of a bill which incorporates the following provisions:

(1) An abortion shall not be unlawful if it is performed before the twentieth week of gestation by a physician licensed to practice medicine in North Carolina upon the written request of the pregnant woman; and if it is performed in a facility licensed by the North Carolina Medical Care Commission.

(2) An abortion shall not be unlawful after the twentieth week of gestation if two physicians certify that the health of the woman is in substantial danger from the pregnancy, or that there is a clear risk that the child may be born with a serious physical or mental defect.

e. Condemned operation of profit-making abortion referral agencies and pledged to do all possible to prevent the establishment of such agencies in North Carolina.

f. Recommended collection, for use at the discretion of the Legislative Committee, of data on:

(1) The reliability and side effects of the current methods of contraception.

(2). The experience of countries and states which have an abortion law similar to the one proposed here.

(3) The basic psychiatric and medical facts concerning abortion.

(4) The basic psychiatric and medical facts concerning the battered child syndrome.

(5) Other pertinent material as approved by the President of the North Carolina Medical Society.

Proposed Amendments to the Constitution

1. Life members shall consist of those members of the Society who shall have retired from active practice on or after the age of 65, and who shall have been dues-paying members for 30 years, or who upon reaching the age of 70 shall have been dues-paying members for 20 years.

2. The Society shall hold an annual meeting, during which there shall be held at least two general sessions, which shall be open to all registered members and other members as provided under Article IV above.

3. To provide for the election of delegates from the specialty sections, Statement (3) below is added so that Article V will read: "The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) Delegates elected by the component county societies and delegates selected by the student members, (2) ex-officio, the past Presidents and past Secretaries and the officers of the Society as defined in this Constitution, and (3) delegates elected by the Specialty Sections as provided for in Chapter XI, Section 1 of the By-Laws."

Amendments to the By-Laws

1. Beginning with the 1974 Annual Meeting, election to the Nominating Committee will be for a term

of three years. At the 1973 Annual Meeting, one member from each of the first, fourth, and eighth districts will be elected for a full term of three years; one member from each of the second, sixth, and tenth districts will be elected for a partial term of two years; and one member from each of the third, fifth, and seventh and ninth districts will be elected for a partial term of one year. At each Annual Meeting thereafter, members of the Nominating Committee will be elected to replace members from the same district whose terms expire that year. No member of the Society shall be elected to the Nominating Committee for more than one full three-year term, unless he shall have been off the Nominating Committee for at least three years.

2. To establish a section on urology, the following recommendations were made:

a. Amend Chapter XI, Section 1, by adding the word "Urology" after the word "Dermatology."

b. Amend Chapter X, Section 16, Blue Shield Committee, by

(1) Adding to the end of the first sentence the words "and urology"

(2) Adding on line three, page 34, after the word "year," a new sentence reading, "The two members representing each of the designated practice specialties shall be from different medical districts."

(3) Adding two additional sentences immediately

after the above sentence, to read: "When representatives of any new practice specialty are added to the Committee on Blue Shield, at their first election one member representing that practice specialty shall be elected for a full term of three years and other member shall be elected for partial term of two years."

3. Change the name of the section on "Traumatology and Orthopedic Surgery" to "Orthopedics"

4. To insure that every Delegate is a member of the Society, every delegate shall be a voting member of the Society and of a component society or hyphenated society or SAMA chapter.

5. Organization of hyphenated society of New Hanover-Brunswick-Pender by rearranging the listing of the counties in the third district to read "Bladen, Columbus, Duplin, New Hanover-Brunswick-Pender, Onslow, and Sampson."

6. Provide for clerical help at Mediation Committee meetings: "When a complaint is being considered, unless in a given case the Committee determines that verbatim testimony should be taken, no person other than Committee members and the witness then being heard shall be admitted to any part of the proceedings, except upon the affirmative vote of the Committee members present."

7. Change the section name to "Family Physicians" by deleting the words "General Practice of Medicine" and inserting in lieu thereof, "Family

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Physicians" and amending all references in the By-Laws to "General Practice" by changing these words to "Family Physicians."

8. Recommends change of name of "Committee on Necrology" to "Committee on Memorial Services."

9. The House rejected a method of redistricting the Society as proposed by the Executive Council.

Actions Relating to the American Medical Association

1. Recommended that the American Medical Association be encouraged to use every available communication technique to disseminate topical and accurate information to physicians and the public.

2. Rejected the resolution calling for re-affirmation of concerns of the Colorado Medical Society for the American Medical Association.

Resolutions Relating to Insurance Matters

1. Requested North Carolina Blue Cross-Blue Shield Inc., and other third party payors, to utilize identical means of determining the amount of compensation, and the manner of making such payment, for both medical school hospitals and community hospitals with teaching programs.

2. Adopted a policy on professional fees determination, negotiation between physician and patient, and their adjudication.

3. Approved and recommended as the preferred method of complying with regulations of the Medicaid Program by the wording of the claim form rather than by individual agreement with each provider or by check endorsement.

4. Recommended that all complaints originating from insurance carriers or intermediaries dealing with improper utilization of services and facilities, as well as inappropriate charges for services by physicians be first reviewed by one of the committees of the Society which perform Peer Review functions: and that only after the accused physician has been notified, an appropriate hearing held, and an opinion rendered, should that Committee refer the matter to the Mediation Committee for further opinion or recommendation for action. Excepted from this full procedure would be questions of committee jurisdiction in a given case wherein the chairman of the potentially involved committees did not agree after informal conference. In this situation a referral may be made to the Mediation Committee or to the Executive Council.

JAMES E. DAVIS, M.D.
Speaker

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Committee and Commission Appointments 1972-1973

NOTE: The Committees listed herein have been authorized by President John Glasson, M.D., and/or as required under the *Constitution and Bylaws*.

Particular note should be taken of the authorization of the HOUSE OF DELEGATES of a Commission form of organizational activity and that all Committees, excepting *COMMITTEE ON NOMINATIONS*, *COMMITTEE ON NEGOTIATIONS*, and *MEDIATION COMMITTEE* are segregated under the respective Commission in which the function of the Committee logically rests. This will tend to eliminate overlapping and duplication in activity programs and result in coordination of the work of the Society in a manner to lessen the work of the delegates in the Annual Meeting of the HOUSE OF DELEGATES.

The President, Secretary and Executive Director of the Society are ex officio members of all Committees and, along with the Commission Chairman, should receive notice of meetings, agenda and minutes of committee meetings during the activity year.

(Superior figures (e.g. 21) indicate the component County Society from which the member emanates, as in the Membership list of the *ROSTER*.)

		Committee Listing	
I. ADMINISTRATION COMMISSION			
		T. Tilghman Herring, M.D., <i>Chairman</i> Wilson Clinic Wilson 27893	
1. Finance, Committee on (I-1)	No. 21	T. Tilghman Herring, M.D., <i>Chairman</i> Wilson Clinic, Wilson 27893	
2. Insurance, Com. on Professional (I-2)	No. 50	John C. Burwell, Jr., M.D., <i>Chairman</i> 1026 Professional Village, Greensboro 27401	
3. Personnel & Headquarters Operation Com. on (I-3)	No. 46	A. Hewitt Rose, Jr., M.D., <i>Chairman</i> 3801 Computer Drive, Raleigh 27609	
4. Retirement Saving Plan Committee (I-4)	No. 56	Jesse Caldwell, Jr., M.D., <i>Chairman</i> 114 W Third Avenue, Gastonia 28052	
II. ADVISORY AND STUDY COMMISSION			
		Roy S. Bigham, Jr., M.D., <i>Chairman</i> 1708 E. Fourth St., Charlotte 28204	
1. American Medical Education & Research Foundation, Com. on (AMAERF) (II-1)	No. 1	A. J. Tannenbaum, M.D., <i>Chairman</i> 1001 N. Elm St., Greensboro 27401	
2. Anesthesia Study, Com. on (II-2)	No. 2	Albert Arthur Bechtold, Jr., M.D., <i>Chairman</i> UNC Sch. of Medicine, Chapel Hill 27514	
3. Auxiliary & Archives of History, Com. Adv. to (II-3)	No. 6	Roscoe D. McMillan, M.D., <i>Chairman</i> Box 232, Red Springs 28377	
4. Cancer, Committee on (II-4)	No. 8	Lewis S. Thorp, M.D., <i>Chairman</i> 100 Nash Med. Arts Mall, Rocky Mount 27801	
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- Bruce B. Blackmon, M.D.⁴³ (Region M)
P. O. Box 8, Buies Creek 27506

William H. Romm, M.D. (Region R)
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 Harry H. Summerlin, Sr., M.D.⁸³ (Region N)
 Box 506, Laurinburg 28352
 Lawrence M. Cutchin, M.D.³³ (Region L)
 Tarboro Clinic, Tarboro 27886

14. Committee on Constitution & Bylaws (5) (2 Consultants) II-5

Henry J. Carr, Jr., M.D.,⁸² *Chairman*
 603 Beamon St., Clinton 28328
 Chalmers R. Carr, M.D.⁶⁰
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 James E. Davis, M.D.³²
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 P. G. Fox, Jr., M.D.⁹²
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 Bowman Gray, Winston-Salem 27103

Consultants:

David G. Welton, M.D.⁶⁰
 1012 Kings Dr., Charlotte 28283
 Thomas B. Dameron, Jr., M.D.⁹²
 P. O. Box 10707, Raleigh 27605

15. Committee on Credentials (Of Delegates to House of Delegates) (3) III-4

Charles B. Wilkerson, Jr., M.D.,⁹² *Chairman*
 100 S. Boylan Ave., Raleigh 27603
 John A. Payne, III, M.D.³⁷
 Box 157, Sunbury 27979
 L. Harvey Robertson, Sr., M.D.⁸⁰
 Box 519, Salisbury 28144

16. Advisory Committee to the Crippled Children's Program (5) IV-7

Robert Underdal, M.D.,³⁴ *Chairman*
 1900 S. Hawthorne Rd., Winston-Salem 27103
 John I. Brooks, Jr., M.D.³³
 Tarboro Clinic, Tarboro 27886
 Ralph W. Coonrad, M.D.³²
 1828 Hillandale Rd., Durham 27705
 Charles G. Longenecker, M.D.¹¹
 30 Victoria Rd., Asheville 28801
 James C. Parke, Jr., M.D.⁶⁰
 Charlotte Mem. Hosp., Box 25541, Charlotte 28201

17. Council on Review & Development (10) (Ex-Officio With Vote-5)

Louis deS. Shaffner, M.D.,³⁴ *Chairman*
 Bowman Gray, Winston-Salem 27103
 Edgar T. Beddingfield, Jr., M.D.,⁹⁸ *Vice-Chairman*
 Wilson Clinic, Wilson 27893
 David G. Welton, M.D.⁶⁰
 1012 Kings Dr., Charlotte 28283
 Robert A. Ross, M.D.³²
 N. C. Mem. Hosp., Chapel Hill 27514
 Frank W. Jones, M.D.¹⁸
 Rt. 3, Westlake Hills, Newton 28658
 George W. Paschal, Jr., M.D.⁹²
 1110 Wake Forest Rd., Raleigh 27604
 John S. Rhodes, M.D.⁹²
 1300 St. Mary's St., Raleigh 27603
 John R. Kernodle, M.D.¹
 Kernodle Clinic, Burlington 27215
 Amos N. Johnson, M.D.⁸²
 Box 158, Garland 28441
 John C. Reece, M.D.¹²
 Grace Hosp., Morganton 28655

Ex Officio with Vote:

John Glasson, M.D.³² (President)
 306 S. Gregson St., Durham 27701
 George G. Gilbert, M.D.¹¹ (President-Elect)
 1 Doctor's Park, Asheville 28801
 Charles W. Styron, M.D.⁹² (Past President)
 615 St. Mary's St., Raleigh 27605
 E. Harvey Estes, Jr., M.D.³² (Secretary)
 Duke Univ. Med. Ctr., Durham 27710
 William N. Hilliard (Executive Director)
 222 N. Person St., Raleigh 27611

18. Committee on Disaster & Emergency Medical Care (9) V-3

George A. Watson, M.D.,³² *Chairman*
 306 S. Gregson St., Durham 27701
 Frank W. Clippinger, M.D.³²
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 Sara J. Dent, M.D.³²
 Duke Hosp., Durham 27710
 George Johnson, Jr., M.D.³²
 N. C. Mem. Hosp., Chapel Hill 27514
 Jesse Meredith, M.D.³⁴
 Bowman Gray, Winston-Salem 27103
 Robert E. Miller, M.D.⁶⁰
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 1610 Vaughn Rd., Burlington 27215
 David R. Williams, M.D.²⁹
 Southgate Shopping Ctr., Thomasville 27360
 Joyce H. Reynolds, M.D.³⁴
 Rt. 2, Kernersville 27284

19. Committee on Drug Abuse (6) (5 Consultants) VI-3

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 Duke Univ. Med. Ctr., Durham 27710
 Benjamin E. Britt, M.D.⁹²
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 Roy Jackson Blackley, M.D.⁹²
 Box 26327, Raleigh 27611
 John A. Ewing, M.D.³²
 N. C. Mem. Hosp., Chapel Hill 27514
 William A. Robie, M.D.⁹²
 5437 Thayer Dr., Raleigh 27612
 Richard L. Spencer, M.D.³⁴
 Rt. 1, Duffer Lane, Pfafftown 27040

Consultants:

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 Drawer 151, Chapel Hill 27514
 Mrs. Ernest B. Spangler, Jr. (Aux.)
 3811 Henderson Rd., Greensboro 27410
 Mr. Roy Epps
 N. C. Drug Authority, 222 N. Person St., Raleigh 27611
 Mr. Charles J. Dunn, Jr., Director, State Bureau of Investigation
 Justice Bldg., Raleigh 27602
 Lt. Col. E. C. Guy
 N. C. Dept. of Motor Vehicles, Raleigh 27610

20. Committee on Eye Care & Eye Bank (13) V-4

Paul M. Abernethy, M.D.,¹ *Chairman*
 1610 Vaughn Rd., Burlington 27215
 Lloyd W. Bailey, M.D.³³
 Box 1279, Rocky Mount 27801
 Arthur C. Chandler, Jr., M.D.³²
 Dept. Oph., Duke Hosp., Durham 27710
 Lee Andrew Clark, M.D.⁹⁸
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Marshal W. Woodard, M.D.¹¹
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21. Committee on Finance (3) (7 Consultants) (2 Vice-Presidents) I-1

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Jesse Caldwell, Jr., M.D.³⁶
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Marvin N. Lymberis, M.D.⁶⁰
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Consultants:

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II—Roy S. Bigham, Jr., M.D.⁶⁰
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III—Josephine E. Newell, M.D.⁹⁸
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IV—W. Howard Wilson, M.D.⁹²
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V—John L. McCain, M.D.⁹⁸
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VI—Mary Margaret McLeod, M.D.⁵³
Drawer 1047, Sanford 27330

VII—George W. Paschal, Jr., M.D.⁹²
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Vice-Presidents:

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22. Committee on Health Care Delivery (16) (3 Consultants) VII-7

Patrick D. Kenan, M.D.,³² *Chairman*
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1601 Medical Center Dr., Wilmington 28401

23. Representative On: Governor's Coordinating Council on Aging (I)

Thomas R. Nichols, M.D.¹² (1973)
306-0 W. Union St., Morganton 28655

24. Committee on Hospital & Professional Relations & Liaison to North Carolina Hospital Association (12) IV-2

Joe M. Van Hoy, M.D.,⁶⁰ *Chairman*
806 Doctor's Bldg., Charlotte 28207

Charles P. Scheil, M.D.,¹⁴ *Vice-Chairman*
Blackwelder Clinic, Lenoir 28645

Archie Y. Eagles, M.D.⁴⁶ (1st)
Medical Arts Ctr., Ahoskie 27910

F. Murray Carroll, M.D.²⁴ (3rd)
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310 Glenwood Ave., Kinston 28501

Charles O. Van Gorder, M.D.²⁰ (10th)
Valley River Clinic, Andrews 28901

Claude A. McNeil, Jr., M.D.⁸⁶ (7th)
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William H. Sprunt, III, M.D.⁹² (6th)
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Ernest W. Staub, M.D., 63 (5th)
Pinehurst Surgical Clinic, Pinehurst 28374

25. Insurance Industry Committee (23) IV-4

Bernard A. Wansker, M.D.⁶⁰ (D) *Chairman*
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William L. Adcock, Jr., M.D.⁹² (NS)
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Marcus L. Aderholdt, M.D.,⁴¹ (Pd) *Vice-Chairman*
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J. Elliott Dixon, M.D.⁷⁴ (GP)
215 E. Second St., Ayden 28513
Charles H. Duckett, M.D.⁴⁴ (GP)
Midway Medical Clinic, Canton 28716
Sidney R. Fortney, M.D.¹³ (1)
68 Lake Concord Rd., NE, Concord 28025
Norman H. Garrett, Jr., M.D.⁴¹ (1)
1038 Prof. Village, Greensboro 27401
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Rex Hosp., Anes Dept., Raleigh 27603
James P. Green, M.D.⁹³ (GP)
176 Beckford Dr., Henderson 27536
Hubert B. Haywood, Jr., M.D.⁹² (Oph)
201 Bryan Bldg., Raleigh 27605
Robert T. Jackson, M.D.⁹² (R)
Rex Hosp., Raleigh 27603
Odell C. Kimbrell, Jr., M.D.⁹² (Endoc)
232 Bryan Bldg., Raleigh 27605
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Harold R. Silberman, M.D.³² (1)
Duke Hosp., Durham 27710
Samuel A. Sue, Jr., M.D.⁴¹ (Or)
1311 N. Elm St., Greensboro 27401
George T. Wolff, M.D.⁴¹ (GP)
1311 N. Elm St., Greensboro 27401

26. Committee on Legislation (19) V-5

H. David Bruton, M.D.⁶³ (5th) *Chairman*
Town Center, Southern Pines 28387
John H. Hall, M.D.,⁴¹ *Vice-Chairman*
1100 Olive St., Greensboro 27401
Edgar T. Beddingfield, Jr., M.D.⁹⁸ (2nd)
Wilson Clinic, Wilson 27893
Edward G. Bend, M.D.²¹ (1st)
Chowan Med. Ctr., Edenton 27932
Kenneth E. Cosgrove, M.D.⁴⁵ (11th)
510 7th Ave., West, Hendersonville 28739
A. J. Crutchfield, M.D.⁴¹ (5th)
93 Prof. Bldg., Winston-Salem 27103
J. Henry Cutchin, Jr., M.D.¹⁸
Sherrills Ford 28673
Mrs. Ledyard DeCamp (Kate) Auxiliary
3411 Seward Place, Charlotte 28211
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Box 815, Burgaw 28425
E. Harvey Estes, Jr., M.D.³² (Secretary)
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Joseph W. Hooper, Jr., M.D.⁶⁵
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L. Harvey Robertson, Sr., M.D.⁸⁰ (8th)
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1012 Kings Dr., Charlotte 28207
James F. Toole, M.D.³⁴ (7th)
Bowman Gray, Winston-Salem 27103
Mr. Martin Schwartz
Duke Univ. Med. Ctr., Durham 27710

27. Committee on Marriage Counseling & Family Life Education (13) VI-4

Eleanor B. Easley, M.D.,³² *Chairman*
1821 Green St., Durham 27705
J. Vincent Arey, M.D.¹³
33 Lake Concord Rd., NE, Concord 28025
Karl Lee Barkley, M.D.⁴¹
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Marianne S. Breslin, M.D.³²
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Takey Crist, M.D.³²
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W. Davis Fort, M.D.⁸⁴
1001 W. 5th St., Albemarle 28001
Jerry Hulka, M.D.³²
UNC Dept. of ObG, Chapel Hill 27514
Eugene B. Linton, M.D.³⁴
751 Bethesda Rd., Winston-Salem 27103
Hans Lowenbach, M.D.³²
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John B. Reckless, M.D.³²
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Luther M. Talbert, M.D.³²
N. C. Mem. Hosp., Chapel Hill 27514
Louis R. Wilkerson, M.D.⁹²
100 S. Boylan Ave., Raleigh 27603

28. Committee on Maternal Health (12) VI-5

W. Joseph May, M.D.³⁴ (8th) (1976) *Chairman and Secretary*
121 Professional Bldg., Winston-Salem 27103
Stephen G. Anderson, M.D.³⁴ (1977)
Bowman Gray, Winston-Salem 27103
Glenn E. Best, M.D.⁸² (3rd) (1978)
104 Main St., Clinton 28328
Clifford C. Byrum, M.D.⁹² (6th) (1973)
3803 Computer Dr., Raleigh 27609
Jesse Caldwell, M.D.³⁶ (7th) (1973)
114 W. 3rd Ave., Gastonia 28052
Arthur C. Christakos, M.D.³² (Duke) (1978)
Duke Hosp., Box 3274, Durham 27710
William E. Easterling, Jr., M.D.³² (UNC) (1975)
UNC Sch. of Med., Chapel Hill 27514
H. Fleming Fuller, M.D.⁵⁴ (2nd) (1975)
Kinston Clinic, Box 268, Kinston 28501
Edgar C. Garber, Jr., M.D.²⁶ (5th) (1977)
1641 Owen Dr., Fayetteville 28304
William A. Hoggard, Jr., M.D.⁷⁰ (1st) (1977)
1202 Carolina Ave., Elizabeth City 27909
Ann H. Huizenga, M.D.⁹² (1972)
State Board of Health, Raleigh 27602
John A. Kirkland, M.D.⁹⁸ (4th) (1976)
Wilson Clinic, Wilson 27893
Robert L. Rogers, M.D.¹⁴ (9th) (1976)
354 S. Mulberry St., Lenoir 28645
Fletcher S. Sluder, M.D.¹¹ (10th) (1975)
406 Flatiron Bldg., Asheville 28801

29. Mediation Committee (5) (1st Five Past Presidents) VIII

Robert A. Ross, M.D.,³² *Chairman*
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Louis deS. Shaffner, M.D.³⁴
Bowman Gray, Winston-Salem 27103

Charles W. Styron, M.D.,⁹² *Secretary*
615 St. Mary's St., Raleigh 27605

30. Committee on Medical Aspects of Sports (14) (2 Consultants) VI-6

Frank C. Wilson, Jr., M.D.,³² *Chairman*
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Frank H. Bassett, III, M.D.³²
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Joseph L. DeWalt, M.D.³²
Iris Lane, Chapel Hill 27514

Carl J. Hiller, M.D.²⁵
P. O. Drawer 1694, New Bern 28560

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Consultants:

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Charlotte-Mecklenburg Sch. System

Box 149, Charlotte 28201
Mr. Raymond K. Rhodes, Director of Athletics
State Dept. of Public Instruction, Raleigh 27605

31. Committee on Medical Education (21) (1 Consultant) (5-Year Terms) II-6

Richard H. Ames, M.D.⁴¹ (1974), *Chairman*
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James M. Alexander M.D.⁶⁰ (1974)
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Albert L. Chasson, M.D.⁹² (1976)
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Thomas D. Kinney, M.D.³² (1973)

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Emery C. Miller, Jr., M.D.³⁴ (1977)

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Edwin W. Monroe, M.D.⁷⁴ (1974)

Box 2772-ECU, Greenville 27834
H. Maxwell Morrison, Jr., M.D.⁶³ (1973)

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Charles L. Nance, Jr., M.D.⁶⁵ (1974)

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Carl N. Patterson, M.D.³² (1976)

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F. M. Simmons Patterson, M.D.³² (1975)

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Richard B. Patterson, M.D.³⁴ (1976)

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C. Glenn Pickard, Jr., M.D.³² (1976)

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32. Medical-Legal Committee (9) V-6

Julius Howell, M.D.,³⁴ *Chairman*
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George R. Clutts, M.D.⁴¹
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L. L. Schurter, M.D.⁹²
Div. Voc. Rehab., Dept. Human Resources,
Raleigh 27602

Henry D. Severn, M.D.¹¹
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33. Committee on Medicare (11) VII-6

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 Douglas Smith, M.D.⁶⁰
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 Marvin L. Slate, M.D.⁴¹
 204 Blvd., High Point 27262

34. Committee on Medicine & Religion (9) (6 Consultants) VI-7

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 First United Methodist Church
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 Rev. T. Max Linnens
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 Rev. Fred W. Reid, Jr.
 N. C. Mem. Hosp., Chapel Hill 27514
 Rev. Samuel Wiley
 Box 6637, College Station, Durham 27708
 Rev. Richard R. Young
 Dept. Pastoral Care, Baptist Hosp.
 Winston-Salem 27103
 Father Thomas J. O'Donnell
 113 N. Seventh St., Smithfield 27577

35. Committee on Mental Health (20) VI-8

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59. Committee on Social Service Programs (Including Medicaid) (19) VII-5

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61. Ad hoc Committee on Constitution & Bylaws Revision (4) II-11

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 Henry J. Carr, Jr., M.D.⁸²
 603 Beamon St., Clinton 28328
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 1200 Broad St., Durham 27705
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 1822 Brunswick Ave., Charlotte 28207

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 Allen Richard Wenner (Student) 38 Cedar Court, Carrboro, N. C.
 Leon Festus Woodruff, Jr. (Student) 25-C College Village Apts., Winston-Salem 27104

WHAT? WHEN? WHERE?

In Continuing Education
 July, 1972

I. Current Events in North Carolina
 July 23-28

Southern Obstetric and Gynecologic Seminar, Inc.
 Place: Grove Park Inn, Asheville

Registration Fee: \$50

For Information: Dr. George T. Schneider, Ochsner Clinic,
 1514 Jefferson Highway, New Orleans, La. 70121

Aug. 16-18

Clinical Decision in Cardiology—3 Days in Cardiology
 Place: Holiday Inn, Myrtle Beach

Sponsors: American Heart Association, Council on Clinical Cardiology; Duke University Medical Center; N.C. Heart Association

Fee: \$60, Fellows & members; \$100 non-members of Council on Clinical Cardiology

For Information: American Heart Association, Council on Clinical Cardiology, 44 E. 23rd Street, New York 10010

Sept. 14-15

17th Annual Angus M. McBryde Newborn Symposium

Place: Duke University Medical Center, Durham

For Information: Dr. George W. Brumley, Division of Perinatal Medicine, Box 2911, Duke University Medical Center, Durham 27710

Sept. 15-16

1972 Walter L. Thomas Symposium on Gynecological Malignancy and Surgery

"Why Cancer Treatment Fails and Its Subsequent Management, Hormonal Aspects of Endometrial Cancer and Urinary Incontinence Problems"

Place: Duke University Medical Center, Durham

Open to: Practitioners and residents in Obstetrics and Gynecology

Sponsored by: Department of Obstetrics and Gynecology, Duke University Medical Center

For Information: William T. Creasman, M.D., Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, 27710

Sept. 27-Oct. 1 (Note correction for May listing)

State Medical Society Committee Conclave

Place: Mid Pines Club, Southern Pines

For Information: Mr. William N. Hilliard, Executive Director, Post Office Box 27167, Raleigh, 27611

October 6

Forsyth County Heart Association Symposium

"Left Ventricular Outflow Obstructive Disease"

"The Detection of Cardiovascular Disease of Children in Office Practice" Speaker — Mary Allen Engle, M.D.

"Myocardial Revascularization — The Cleveland Clinic Experience"

"The Surgical Mission of Myocardial Revascularization" Speaker—Donald B. Effler, M.D.

"Pathological Findings in Pre-Hospital Deaths Due to Coronary Atherosclerosis"

"The Geographic Pathology of Coronary Atherosclerosis: Speaker—Robert Foster Scott, M.D.

Place: Holiday Inn West, Winston-Salem

Sponsored by: Forsyth County Heart Association

For Information: Mrs. Katherine I. Cox, Executive Director Forsyth County Heart Association, 2046 Queen Street, Winston-Salem, N. C. 27103

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No side effects, clinical reports of irritation or sensitization extremely rare.

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Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.

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Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References: 1. Olsen, J.R. Journal-Lancet 85:287 (July) 1965. 2. Giorlando, S.W. Ob/Gyn Dig. 13:32 (Sept.) 1971. 3. Decker, A. Case Reports on File, Medical Department, Julius Schmid. 4. Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. 90:370 (Oct. 1) 1964. 5. Lechevalier, H. Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. 6. Friedel, H.J. Maryland M.J., 75:36 (Feb.) 1966.



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Oct. 16-17

Joint Meeting of N.C.-S.C. Societies of Ophthalmology and Otolaryngology

Place: Blockade Runner Motor Hotel, Wrightsville Beach
For Information: Banks Anderson, Jr., M.D., N.C. Society of Ophthalmology and Otolaryngology, Duke University Medical Center, Durham 27710

II. Coming Events in North Carolina

Nov. 17-18

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and The North Carolina Pediatric Society

Place: The Carolina, Pinehurst

For Information: Mrs. John McLain, 3209 Rugby Road, Durham, N.C. 27707

III. Out of State (through October, 1972)

Sept. 18-20

American Academy of Orthopaedic Surgeons Course
"Orthopaedic Nursing"

Place: Atlanta, Georgia

For Information: Joseph H. Dimon, III, M.D., 1938 Peachtree Road, N.W., Atlanta, Georgia 30309

Oct. 12-14

American Academy of Orthopaedic Surgeons Course
"Surgery in Rheumatoid Arthritis"

Place: Atlanta, Georgia

For Information: F. James Funk, Jr., M.D., 1938 Peachtree Road, N.W., Atlanta, Georgia 30309

Oct. 16-18

American Academy of Orthopaedic Surgeons Course
"Neuromuscular Problems of Childhood"

Place: Charlottesville, Virginia

For Information: Warren G. Stamp, M.D. and Wilton H. Bunch, M.D., University of Virginia Hospital, Charlottesville, Va. 22901

Send information for listing to WHAT, WHEN, WHERE, Box 8248, Durham, North Carolina 27704. To be listed in a specific issue, information must be received by the 10th of the preceding month. Issues are scheduled for appearance on the 15th of each month.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Dr. Walter Wolfe, assistant professor of surgery, presented a paper at the meeting of the American Association for Thoracic Surgery in Los Angeles, Calif., May 1-3 on "The Effect of Transpulmonary Pressure on Airway Smooth Muscle Contraction."

* * *

Duke has received gifts totaling \$1 million to establish two professorships in general pediatrics. They will be known as the Wilburt C. Davison Professorships in General Pediatrics, named for Dr. Davison, a pediatrician and first dean (1927-1960) of the Duke School of Medicine.

Half of the gift came from the Duke Endowment and the other half from the Doris Duke Foundation.

Dr. Samuel L. Katz, chairman of pediatrics, said

that increasingly medical students and pediatrics residents are expressing interests in broad-based training programs, and that the Davison Professorships will enable Duke to move more rapidly in response to this interest in general pediatrics.

* * *

The exhibit prepared by Dr. Robert Brame, associate professor of obstetrics-gynecology, and Dr. Ed Hammond (Ph.D.), associate professor of community health sciences and biomedical engineering, won "Prize Award" at a meeting of the American College of Obstetricians and Gynecologists in Chicago.

The exhibit, which included a computer and story board, explained the two departments' cooperative effort in developing a computerized obstetrical record which makes patient case history information more quickly and more usefully available.

* * *

Dr. Arvin E. Robinson, a second-year advanced fellow, has received a James Picker Foundation fellowship to support research and training in radiology and nuclear medicine. Robinson's studies include small airway dynamics by magnification radiography under various physiologic and pathologic conditions.

* * *

Dr. John Reckless, associate professor of psychiatry and head of the Division of Psychosomatic

Illnesses, and Mrs. Alexandra Fauntleroy, co-therapist, attended a two-day invitational meeting at the Reproductive Biology Foundation in St. Louis in May as one of six teams being trained by the foundation in the Masters and Johnson treatment method for sexual distress.

Reckless and Mrs. Fauntleroy spent a month there last fall in association with Masters and Johnson and being trained in their methodology.

Later in May Reckless was visiting speaker at the Louisiana State University where he discussed treatment of common marital and sexual distress.

* * *

Business officers representing 30 medical schools in 15 states met at Duke in May for a two-day session on operations of an academic health center. The meeting was of the Business Officers Section (Southern Region) of the Association of American Medical Colleges.

* * *

In a speech that took the form of a letter to the President and the Democratic Party nominee for president, Dr. William G. Anlyan, vice president for health affairs, told a Boston audience May 31 that politics should be removed from the planning and implementation of the nation's health care delivery system.

Anlyan's speech was the 82nd Shattuck Lecture of the Massachusetts Medical Society. The text was published in the *New England Journal of Medicine*.

"The time span to achieve an optimum (health care) system may extend beyond the dominance of any one party," Anlyan noted. "Therefore, a blueprint that can be supported by both parties is required."

* * *

Dr. Nicholas G. Georgiade, professor of plastic and maxillofacial surgery, presented a paper at the annual meeting of the American Association of Plastic Surgeons held in Salt Lake City, Utah May 15. His topic was "The Management of Complex Soft Tissue and Bony Facial Injuries."

* * *

Dr. Everett H. Ellinwood, associate professor of psychiatry, gave a paper on "Evolving Behavior in an Animal Model Psychosis" at the American Psychiatric Association meeting in Dallas, Tex., May 1.

* * *

Dr. R. Edward Huffman, chief of occupational psychiatry at Highland Hospital, was elected to membership in the Group for Advancement of Psychiatry at its meeting in Philadelphia.

* * *

Dr. R. Edward Huffman, chief of the Occupational Psychiatry Section of Highland Hospital, led a seminar for personnel from the Tennessee Valley Authority in Gatlinburg, Tenn. It was entitled "Man: Toward Better Understanding."

Staff members assisting Dr. Huffman included Dr.

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Jack W. Bonner III, Dr. Hal Gillespie, and Dr. Cliff Green. Lib Harkins, chief of the Social Work Section, Dr. Dale Johnson, chief of the Psychology Section, and Terry Modlin, director of information services, also assisted in the seminar.

* * *

Dr. F. M. Simmons Patterson, assistant professor of surgery, was installed as president of the North Carolina Chapter of the American College of Surgeons at the group's annual meeting held at Wrightsville Beach.

* * *

Dr. Glen Barden, senior resident in orthopaedic surgery, was selected as one of five residents in the United States to attend the annual meeting of the American Orthopaedic Association as a guest of the Association in Bermuda June 25-30.

* * *

Dr. Lois Pounds, assistant professor of pediatrics, participated in the second annual Governor's Conference on Child Abuse and Neglect held in Raleigh. She was a member of a panel discussing "Recognition of the Abused Child."

* * *

Dr. Charles E. Buckely III, associate professor of medicine, attended a meeting of the American Association of Immunology of the Federation of American Societies for Experimental Biology held in Atlantic City, N. J.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE WAKE FOREST UNIVERSITY

Four faculty members at the Bowman Gray School of Medicine recently were promoted to the rank of full professor. They are Dr. Clair E. Cox II, urology; Dr. John H. Edmonds, medicine; Dr. Julius A. Howell, surgery; and Dr. Henry S. Miller Jr., medicine.

Promoted to the rank of associate professor were Dr. Jean D. Acton, microbiology; Dr. Paul M. James Jr., surgery; Dr. Noel D. M. Lechner, laboratory animal medicine; Dr. Edward M. Lieberman, physiology; Dr. Ruth O'Neal, pediatrics; Dr. Doris Y. Sanders, pediatrics; and Dr. John A. Stanley, ophthalmology.

Dr. Robert L. Dixon was promoted to assistant professor of radiology.

Members of the medical school's volunteer faculty who received promotions were Dr. W. Joseph May, to clinical associate professor of obstetrics and gynecology; Dr. Francis W. Green, to clinical assistant professor of medicine; Dr. Albert O. Griffin Jr., to

clinical assistant professor of medicine; Dr. Frank E. Pollock, to clinical assistant professor of orthopedic surgery; and Dr. William Satterwhite, to clinical assistant professor of otolaryngology.

* * *

Exhibits prepared at the Bowman Gray School of Medicine won two first-place awards at the 67th annual meeting of the American Urological Association held in Washington, D. C.

An exhibit on "Prostatic Echography," a new technique which utilizes ultrasound to diagnose diseases of the prostate, won the Samuel A. Vest Memorial Prize for clinical research. The Vest Award is regarded as the grand prize in the American Urological Association's exhibit competition.

Another exhibit on "Intersegmental Nephrotomy," a surgical technique developed at the Bowman Gray School of Medicine and North Carolina Baptist Hospital, won the first-place award in the laboratory research category.

The awards went to Dr. William W. King, chief resident in urology, who was principal author of the exhibits. The exhibits were designed and constructed by the medical school's Division of Audiovisual Resources.

Collaborating with Dr. King on the "Prostatic Echography" exhibit were Dr. R. Mark Wilkiemeyer, resident in urology; Dr. William H. Boyce, professor of urology; and Dr. William M. McKinney, associate professor of neurology. Drs. King and Boyce prepared the exhibit on "Intersegmental Nephrotomy."

* * *

Dr. Clark E. Vincent, professor and director of the Behavioral Sciences Center, delivered the keynote address at the annual meeting of the Canadian Fertility Society, held recently in London, Canada. He spoke on "The Physician as Consultant in Sexual and Marital Health."

* * *

Three faculty members at the Bowman Gray School of Medicine have been named recipients of travel awards to support their attendance this summer at international scientific meetings.

They are Dr. Edward M. Lieberman, associate professor of physiology; Dr. B. Moseley Waite, associate professor of biochemistry; and Dr. Michael J. Walsh, assistant professor of pharmacology.

The International Travel Awards Program was established recently at the medical school to further the career development of outstanding young faculty members. The awards are made on the basis of the scientific merit of the faculty member's work and the potential of his proposed travel for career development.

Dr. Lieberman, whose work deals with the transmission of nerve impulses, will present a paper on "Acetylcholine: A Physiologic Role in Excitation of

Axons?" at the IV International Biophysics Congress Aug. 7-14 in Moscow.

Dr. Waite, whose work involves studies on the metabolism of fats in mammalian tissue, will attend the meetings of the Federation of European Biochemical Societies and the 15th International Conference on the Biochemistry of Lipids Aug. 21-31 in The Netherlands.

Dr. Walsh is scheduled to present a paper on "Possible Role of Alkaloids from Amines in Alcohol Pharmacology and Alcoholism" at the 30th International Congress on Alcoholism and Drug Dependence held Sept. 3-10 in Amsterdam.

* * *

North Carolina Baptist Hospital and the Bowman Gray School of Medicine have been awarded a \$400,000 grant from the Appalachian Regional Commission to support the medical center's building program.

The grant funds will be applied toward the construction of an ambulatory care center and toward the renovation of existing hospital facilities.

The award was based on the services provided by the medical center to the state's Appalachian region. North Carolina Baptist Hospital is the major referral hospital for the 29 North Carolina counties in the region.

Construction of the ambulatory care center build-

ing and the renovation of the existing hospital facilities are scheduled to begin following the completion of the hospital's 16-story Z. Smith Reynolds Foundation Patient Tower. The patient tower is expected to be ready for total occupancy by January, 1973.

* * *

The graduating class of the Bowman Gray School of Medicine dedicated its yearbook, "The Gray Matter," to Dr. Charles E. McCall, associate professor of medicine.

In the dedication, the seniors referred to Dr. McCall as "a physician who is totally involved in medical education and research and a man who involves the students in his life as a physician."

Dr. McCall, who was appointed to the Bowman Gray faculty in 1968, holds the B.S. degree from Wake Forest College and the M.D. degree from the Bowman Gray School of Medicine.

As a medical student he was the recipient of the Faculty Award, the highest honor that can be bestowed on a student by the medical school faculty. The yearbook dedication is regarded as the highest honor that a faculty member can receive from the students.

The students also presented Golden Apple Awards for excellence in clinical teaching to Dr. Francis M. James, associate professor of anesthesia, and Dr.

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Asst. Administrator

AFFILIATED CLINICS

Bluefield Mental Health Center
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David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
Leslie J. Borbely, M.D.

Mental Health Clinic

Professional Building, Wise, Va.
Pierce D. Nelson, M.D.

Richard Burroughs, resident in medicine. Dr. Lawrence R. DeChatelet, assistant professor of biochemistry, received the Golden Apple Award for excellence in teaching in the basic medical sciences.

* * *

Dr. Francis Fleming Jr. of Concord, a member of the graduating class of the Bowman Gray School of Medicine, recently received the highest honor that can be bestowed on a medical student by the Bowman Gray faculty. He was presented the Faculty Award at the medical school's annual student awards ceremony.

Fleming earlier was named the recipient of the Outstanding Senior Reynolds Scholar Award. This \$1,000 award is presented annually by the Z. Smith Reynolds Foundation.

Other members of the graduating class who were recognized for scholastic achievement were:

—James C. Hoyle Jr. of Roanoke Rapids, the Pediatric Merit Award.

—Louis Weinstein of Revere, Mass., the Obstetrics-Gynecology Merit Award.

—Leon F. Woodruff Jr. of Selma, the Annie J. Covington Memorial Award in Cardiology and the Upjohn Achievement Award.

—Eric C. Nelson of Canoga Park, Calif., and Hugh T. Stoddard Jr. of Sumter, S. C., the C. B. Deane Memorial Award in Oncology.

—Miss Laura L. Winstead of Elm City the Janet M. Glasgow Memorial Scholastic Citation of the American Medical Women's Association.

Two rising juniors also were recognized. Mrs. Grace S. Burgess of New Bern received the Roche Award for achievement in the basic medical sciences, and Stephen T. Howarth of Opa Locka, Fla., won the Welch - Kempton Myasthenia Gravis Research Award.

* * *

Dr. Robert N. Headley, associate professor of medicine, is the new president of the North Carolina Heart Association. He was installed at the association's 23rd annual meeting and scientific sessions in Charlotte.

* * *

Dr. William J. Spencer, assistant professor of medicine, recently was installed as president of the Forsyth County Heart Association. Dr. L. Earl Watts, associate professor of medicine, was elected president-elect.

* * *

Dr. Hugh B. Lofland Jr., professor of pathology, spoke on "Plasma Lipids and Atherosclerosis — Modern Challenges" at a recent symposium in laboratory medicine at the Boston (Mass.) Museum of Science.

* * *

Dr. Eben Alexander Jr., professor of neurosurgery, recently served as visiting professor at Hartford (Conn.) Hospital. He presented lectures on "Ear Injuries" and "Spinal Cord Injuries."

Dr. Stephen G. Anderson, assistant professor of obstetrics and gynecology, presented a paper on "Clinical Application of Uterine Blood Flow Studies" May 24 at Indiana University School of Medicine.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

Researchers at the UNC Center for Alcohol Studies will launch a probe this summer to discover why Orientals become more intoxicated on the same amount of alcohol than Caucasians.

The study of physiologic and biochemical factors connected with alcohol consumption is expected to shed new light on whether the difference in apparent intoxication rates between Orientals and Caucasians is cultural, biochemical, or psychological.

Knowing this, we may get some new insights into the causes of alcoholism which may point us toward new curative and preventive measures, said Dr. John Ewing, director of the Center.

A tiny, photo-electric ear ring (attached to the ear lobe) will measure moment-to-moment pulse pressure changes as subjects drink under laboratory

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conditions. This information will be recorded on tape, combined with blood alcohol levels, psychological information and subjective sensations to give UNC scientists a better picture of ethnic differences as related to alcohol consumption.

Co-principal investigator with Dr. Ewing will be Dr. Arthur McBay, chief toxicologist for the North Carolina Medical Examiner System. Also assisting will be Mrs. Levan Kuck, a third year medical student at UNC who is a native of Vietnam.

* * *

Dr. Warner L. Wells, professor of surgery, has been named chairman of the Osler Medal Committee of the American Association for the History of Medicine.

The UNC surgeon was elected at the historical group's annual May meeting in Montreal.

Dr. Wells said the Osler Medal is awarded annually to a medical student in the United States or Canada. Aim of the award is to stimulate creative activity among medical students. In awarding the prize, Dr. Wells said, we look for potential to contribute to medicine of the future.

* * *

The Neurobiology Program of the University of North Carolina has received a two-year grant of \$350,000 from the Alfred P. Sloan Foundation of New York.

The Neurobiology Program is an interdisciplinary effort at UNC which carries on research and training in the neural sciences. The program was created six years ago and now has 40 faculty members from 11 departments and the North Carolina Department of Mental Health in Raleigh.

* * *

The appointment of Dr. Cecil G. Sheps as vice chancellor for health sciences was announced May 12 by Chancellor Ferebee Taylor following approval of President William C. Friday and the University Trustees Executive Committee.

The appointment was made retroactive to Feb. 1, 1972.

Dr. Sheps has been interim vice chancellor for health sciences since February, 1971.

The vice chancellor for health sciences has responsibility for the Schools of Medicine, Dentistry, Nursing, Pharmacy, Public Health, and a number of health-related institutes and centers.

One of the nation's leading authorities on ways to improve delivery of health services, Dr. Sheps came to Chapel Hill in 1968 as the first director of the UNC Health Services Research Center. He resigned that position May 12.

* * *

Over 500 students received degrees and certificates from the University of North Carolina Division of Health Affairs during graduation exercises here May 12 and 14.

The Schools of Nursing, Dentistry, Medicine and Pharmacy held special programs to honor their graduates.

Degrees awarded included—Nursing, 50 bachelor of science and 22 master of science; Pharmacy, 163 bachelor of science; Medicine, 70 M.D.'s; Dentistry, 28 certificates and 21 bachelor of science in dental hygiene; seven bachelor of science in dental auxiliary teacher education; 37 certificates in dental assisting; 10 master of science; and 53 D.D.S.; Physical Therapy, 21 bachelor of science; Medical Technology, 1; Public Health, 33 master of science; 41 master of public health; and 5 master of science in environmental engineering.

* * *

Dr. Kenneth Sugioka, professor and chairman of the UNC Department of Anesthesiology, chaired the annual meeting of the Southeastern University Departmental Anesthesia Chairmen May 12-14 in Key Biscayne, Fla.

A member of the UNC School of Medicine faculty since 1954, Dr. Sugioka was named chairman of the Department of Anesthesiology two years ago when it changed from divisional status to a department.

* * *

Eighteen educators and administrators interested in organizational change in health care met here May 18-19 for a closed seminar, "Innovation in Health



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Care Organizations: An Issue in Organizational Change."

The meeting was jointly sponsored by the Health Services Research Center and the Department of Health Administration.

* * *

Dr. Ralph Penniall, a University of North Carolina biochemist, has been awarded a \$12,900 National Science Foundation research grant for continued study of the manner in which mammalian cells manufacture certain proteins found in the mitochondria of cells.

Mitochondria are found in the cells of all aerobic (oxygen dependent) organisms and are important in the organism's ability to manufacture energy from foods.

The research effort will be particularly directed to a study of the manner of synthesis of the terminal enzyme of cell respiration (cytochrome oxidase) which is located in the mitochondria, Dr. Penniall said.

A professor in the Department of Biochemistry and Nutrition, UNC School of Medicine, Dr. Penniall is being assisted by Dr. Nancy M. Davidian and Mrs. Joan P. Holbrook.

* * *

Dr. Larry J. Loeffler, a UNC medicinal chemist, has been awarded a three-year, \$40,130 research grant by the General Medical Division of the U. S. Public Health Service.

An assistant professor in the School of Pharmacy, he will be studying the use of antibodies in drug analysis and medicinal chemistry. Initially, Dr. Loeffler will be concerned with the development of very sensitive radioimmunoassays for quantitative determination of substances such as hormones, hallucinogens, barbiturates, and other drugs of abuse.

* * *

Carol J. Hogue, a UNC Ph.D. candidate, has been awarded \$15,560 grant from the Ford and Rockefeller Foundations' Program in Support of Social Science and Legal Research on Population Policy.

She will be studying the long-term complications of induced abortion—primarily prematurity in pregnancies subsequent to abortions—and the implications for abortion policy.

One of 28 chosen for funding by the program, Mrs. Hogue will be doing the research in Skopje, Yugoslavia. Legal abortions have been performed on a wide scale in Yugoslavia since 1960. The 14-month grant began July 1.

* * *

Thirty full-time faculty appointments for the University of North Carolina Division of Health Affairs have been announced by Chancellor Ferebee Taylor following approval of President William C. Friday and the University Board of Trustees.

Included in the appointments are two professors,

one associate professor, 17 assistant professors, five instructors, three visiting professors, and two visiting assistant professors.

* * *

The Radiology Department was host to 50 radiologic technologists for a two-day workshop on neuroradiologic procedures the weekend of May 20-21. Technologists registering for the course represented a broad cross-section of community hospitals throughout the state.

Twenty-one members of the Radiology Department served as faculty. Radiologists, radiologic technologists, and service engineers presented an intensive two-day program of lectures, demonstrations, and study sessions. Self-instruction materials prepared by the faculty were presented for the first time at a radiologic technology meeting and were enthusiastically received by the students. The meeting was climaxed by a banquet at the Carolina Inn.

* * *

The R. Beverly Raney Visiting Professorship in Orthopaedic Surgery was inaugurated at the University of North Carolina School of Medicine in May.

The professorship was established by former residents and faculty in honor of R. Beverly Raney, M.D. who was Chairman of the Division of Orthopaedic Surgery from 1952 to 1967. It will enable a distinguished orthopaedic educator to visit the

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Division of Orthopaedic Surgery each year for lectures and conferences with the staff and students.

Dr. Charles S. Neer, II, was selected as the First Raney Visiting Professor. Dr. Neer is clinical professor of orthopaedic surgery at the New York Orthopaedic Hospital, Columbia-Presbyterian Medical Center, in New York City. He gave presentations on "Shoulder Injuries" and "Fractures About the Knee." In addition, Dr. Neer delivered the First Annual Raney Lecture in Orthopaedic Surgery on the subject of "Shoulder Prostheses," a subject on which he is recognized as one of the world's foremost authorities. * * *

A team of orthopaedic investigators at the University of North Carolina School of Medicine has recently been given the Nicholas Andry Award for orthopaedic research. The award, presented annually by the Association of Bone and Joint Surgeons in recognition of original and stimulating research in the musculoskeletal field, was made to Dr. Frank C. Wilson, Dr. William H. Bowers, and Mr. Walter B. Greene for their work on "Antibiotic Prophylaxis in Experimental Bone Infections." The study was presented at the annual meeting of the Association of Bone and Joint Surgeons held in Seattle, Washington, in June. Dr. Wilson is chairman of the Division of Orthopaedic Surgery, Dr. Bowers is a resident in orthopaedic surgery, and Mr. Greene is a fourth-year student at the School of Medicine.

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

"Our thrust has been to help the physicians and nurses develop more skills in training personnel in emergency rooms, and to stimulate creativity on their part to use teaching methods they may not have used before," said Mrs. Mary Davison, R.N., E.R. Supervisor at N. C. Memorial Hospital, about the Emergency Medical Services Workshop held at the Chapel Hill hospital on May 15-26.

The EMS Workshop was part of NCRMP's Emergency Medical Services program, which is coordinated by James E. Camp, assistant director of the N. C. Hospital Association. The workshop, which utilized facilities at the UNC School of Medicine as well as N. C. Memorial Hospital, was directed by Dr. George Johnson, professor and chief of the Division of Vascular Surgery at UNC.

Participants in the workshop were teams of physicians and nurses who have direct responsibility for the operation of hospital emergency rooms. Physicians attended the first two days of the workshop, which included discussions of the chain of events in an individual's emergency care, identification and

solution of problems at the local level, and the standards of the Joint Commission on the Accreditation of Hospitals. Also included in the two-day physician-nurse sessions were clinical sessions on intubation and chest tubes and CVP lines, and an explanation of the MAST program. The joint session ended with a two-hour discussion of education and teaching methods.

The nurses remained for an additional eight days of training in organization, management, and personal and professional relations, as well as inservice education and technical procedures. Sessions were held on the role of the E.R. nurse in direct patient care, patient teaching in the E.R., personal and personnel relations, and the emergency room record. Clinical sessions focused on shock, multiple traumatic injuries, and cardiac emergencies. Participating nurses spent three to four hours per day in the E.R., where they received a combination of experience with actual trauma victims, informal instruction, and sharing of routines.

Individual nurses spent time in various clinics, the operating room, Intensive Care Unit, Coronary Care Unit, Rehabilitation Rounds, and with rescue squad teams. Because most were from small hospitals, some time was also spent discussing transfer of the trauma victim. Miss Carol G. Jones, R.N., Head Nurse in the E.R., said that emphasis was placed on how to stabilize the victim before moving him, and on the importance of communications between the nurses and doctors, hospitals, and ambulance personnel involved in the transfer.

Teams are expected to provide training for other emergency room personnel in their local hospital. * * *

More than 250 health care experts from across the country met May 21-24 in Sun Valley, Idaho, to discuss the relationships between existing and proposed health care delivery systems and the many categories of personnel involved in providing health care services. The meeting was the Regional Medical Programs National Allied Health Conference, sponsored by the Regional Medical Programs Service of HEW's Health Services and Mental Health Administration. The Conference theme was *Health Manpower in the 70's . . . Allied Health and the New RMP Issues*.

Participants included representatives of each of the 56 Regional Medical Programs as well as other government and private groups. Attending from NCRMP were Mr. Ben Weaver, deputy director; Miss Audrey Booth, director of the Professional Services Division; and Dr. Eloise Lewis, dean of the UNC-G School of Nursing and a member of NCMP's Regional Advisory Group. * * *

Fifteen nurses will be selected to attend a Cancer Screening Course, funded by NCRMP and administered by the Cancer Control Program of the North

Carolina State Board of Health. The program will include both formal classroom and supervised clinical training in the technique of taking cervical pap smears and teaching breast self-examination. The two-day formal session will be conducted in Greenville by the staff of the ECU School of Nursing. Topics will include screening concepts, cancer's etiology and epidemiology, anatomy, screening techniques, and interpretation of screening results.

Nurse participants will then return to local nurse-clinic settings, arranged by the Cancer Control Program, where the newly learned screening techniques will be practiced under the supervision of a physician and the nurse who normally operates the clinic.

* * *

A medical Symposium on Pediatric Emergencies, sponsored by the Craven-Pamlico Medical Society in cooperation with NCMF's Project in Continuing Education for Eastern North Carolina, was held in New Bern on May 26. The symposium was designed for family physicians, pediatricians, and others who work with children. Speakers were Dr. William DeMaria and Dr. Ramon Canent from Duke University and Dr. John Knelson and Dr. Campbell McMillan from UNC, Chapel Hill. They discussed pediatric renal, cardiac, and hematologic emergencies, and respiratory emergencies in newborn infants.

The dinner speaker was Charles Dunn, Director of the State Bureau of Investigation, who spoke on North Carolina's drug abuse problem.

* * *

The *Hospital Cancer Program* film, excellent for professional groups, is still available without charge from NCRMP or the North Carolina Cancer Society. (The UNC Audio-Visual Bureau has a copy which may be borrowed for \$3.00.) The 20-minute, 16mm motion picture in sound and color graphically portrays the role of the multi-disciplinary cancer program in the community hospital, with some emphasis on the role of an efficient cancer registry. Copies of the film, produced jointly by the American College of Surgeons and the American Cancer Society, can be obtained for single or multiple showings.

AMERICAN HEALTH CONGRESS

More than 50 special interest sessions for health care personnel will be featured at the first annual American Health Congress. The meeting will be held in Chicago's McCormick Place, August 7-10.

Personnel, food service, nursing, public relations, volunteer services, design and construction, education and training, and emergency services are among the disciplines which will be highlighted during the morning programming at the Congress.

The American Health Congress, expected to draw about 22,000 health professionals and other representatives of health care institutions, is sponsored by

the American Hospital Association, American Nursing Home Association, Catholic Hospital Association, and Health Industries Association.

New Oral Cholecystographic Medium Provides Diagnostic-Quality Films

A new oral contrast medium which provides reliable, diagnostic-quality x-ray films of the gallbladder has been made available to radiologists, it was announced by Winthrop Laboratories, a leading producer of radiopaque compounds.

It is the first new oral cholecystographic medium introduced in a decade. Called Bilopaque (sodium tyropanoate), it was studied for six years in more than 5,000 patients. These tests, according to Winthrop, disclosed that the new medium permits good diagnostic evaluation with a low incidence of diarrhea, nausea and other gastrointestinal disturbances, and "is usually well tolerated."

Four capsules (3 Gm) of Bilopaque are presently required for all adult patients, regardless of body weight, due to its ability to concentrate in the gallbladder. This lesser dosage is often an advantage to patients who have difficulty swallowing large amounts of medication.

Bilopaque is sodium 2-(3-butyramido-2,4,6-triiodobenzyl)-butanoate, containing 57.4 percent iodine. It is supplied in capsules of 750 mg.: envelopes of four capsules in boxes of five and 25 envelopes, and bottles of 500 capsules with 150 dispensing envelopes.

Guidelines in EEG Now Available

The American Electroencephalographic Society announces the availability of a new series of publications, "Guidelines in EEG" with information of potential use to physicians, technologists, nurses, hospital administrators and others directly or indirectly concerned with electroencephalography. Three titles are presently available: (1) "Minimum Technical Standards for EEG Recording in Suspected Cerebral Death," (2) "Minimum Technical Requirements for Performing Clinical Electroencephalography" and (3) "Standards of Practice in Clinical Electroencephalography." Other titles will be added to the series in time. Copies of the Guidelines are available for \$1.00 each (to help defray printing and postage costs) upon request to: Mrs. Margaret H. Henry, Executive Secretary, The American EEG Society, 36391 Maple Grove Road, Willoughby Hills, Ohio 44094.

New Film on Emergency Readiness

A new film of great interest to motorists was premiered in Wausau, Wisconsin, early in June. "Ready . . . or Not?," a fourteen minute color movie suitable for television or community groups, was given its first public showing by Employers Insur-

Pinworm therapy is often a family affair



Contraindications: History of hypersensitivity to thiabendazole.

Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.

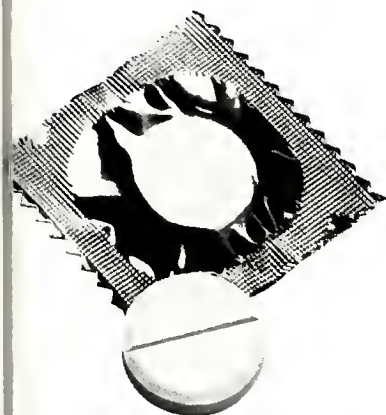
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction,

patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live *Ascaris* in the mouth and nose. Hypersensitivity reactions

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will keep to the
regimen you prescribe

include: fever, facial flush, chills, conjunctival injection,
angioedema, anaphylaxis, skin rashes, erythema multiforme
(including Stevens-Johnson syndrome), and lymphadenopathy.
Supplied: Chewable tablets, containing 500 mg thiabendazole,
in boxes of 36, strip packaged, individually foil wrapped;
suspension, containing 500 mg thiabendazole per 5 cc, in
bottles of 120 cc.

For more detailed information, consult your MSD representa-
tive or see the Direction Circular. Merck Sharp & Dohme,
Division of Merck & Co., Inc., West Point, Pa. 19486

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large round- worm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

ance of Wausau, the company which sponsored and produced it.

"Ready . . . or Not?" is a dramatic plea to individuals to get themselves "emergency ready" in case they find themselves the first on the scene of a serious accident. The film's message is delivered through a hypothetical family camping accident and an auto accident. It stresses capability for securing

the accident scene and dealing with life threatening situations such as a breathing crisis, severe bleeding, and spinal injuries.

"Ready . . . or Not?" is available from either the Film Librarian, Employers Insurance of Wausau, 2000 Westwood Drive, Wausau, Wis. 54401, or Modern Talking Pictures, 1909 Prudential Plaza, Chicago, Ill 60601.

Month in Washington

The American Medical Association has asked Congress to increase the Administration's budget for medical education and other health programs.

"We believe that, instead of terminating the federal construction program for medical schools at the end of fiscal year 1973 as has been proposed by the Administration, at least \$200 million per year, beginning immediately and continuing for at least three years, is going to be necessary," said Raymond T. Holden, M.D., a member of the AMA's Board of Trustees before a subcommittee of the House Appropriations Committee.

Dr. Holden, accompanied by C. H. William Ruhe, M.D., Director of the AMA Division of Medical Education, told the Subcommittee "we have received information from a number of medical schools that their plans, developed over the past years, are absolutely dependent on a federal construction grant program."

Present levels of funding, the AMA spokesman said, "will leave several of these schools in the position of having made the commitment (for increased enrollment) in good faith and implemented the first phase (basic facilities), only to find the federal program of assistance may not continue" for the implied commitment of federal help for construction of clinical facilities.

"Moreover, some new medical schools are completely dependent on federal funds for construction in order to get started," said Dr. Holden. "Even if they can find a way to go ahead without federal aid for construction, these schools reach full operation much more slowly without federal funds."

The Administration's proposal for guaranteed loans and interest subsidies to spur construction is not a feasible method of assuring construction, Dr. Holden said. With many private medical schools

living "a hand-to-mouth" existence, "it is not realistic to expect" them to amortize the costs of facilities producing no income, he declared.

Noting that the Administration has requested \$5 million for support of family practice training the next fiscal year while the legislation authorizes \$35 million, Dr. Holden said "we would support full funding if there were assurances that the funds could be used at this time." One of the more serious shortages in the profession is for family practitioners. He proposed that \$20 million be provided until more programs are geared up.

Much more money is needed for programs to combat alcoholism, Dr. Holden testified. The Administration's 1972 budget "does no more than mark time in both research and training, particularly in view of increasing costs. There is need for full appropriation of the \$80 million authorized for grants to states for treatment and rehabilitation programs.

The Administration's plan to cut \$15 million from manpower development programs of the National Institute of Mental Health was criticized, particularly the slash in funds for the psychiatric residency program as "the first step in a complete abolition of that program." The residency program is needed to cope with the rising incidence of mental illness and because training funds have not been forthcoming from other sources, he said.

The Appropriations Committee was urged to limit the use of funds for health maintenance organizations to a completion and evaluation of the 110 grant projects already authorized by law and to "preclude any further expansion without congressional direction."

"The scope of HEW's present activity is more than ample to establish an experimental basis to ascertain any validity in this form of contract practice

for future governmental support," Dr. Holden told the lawmakers.

* * *

Health Maintenance Organizations were the subject of a panel discussion at the annual meeting of the U. S. Chamber of Commerce in Washington.

Jean Harris, M.D., of the National Medical Foundation, questioned whether HMO's are capable of coping with health problems in the inner city. The particular problems of these areas make it "almost impossible" for an HMO, as we understand them today, to function. The costs will be high and the poor will not agree to pay monthly premiums. "The only solution would be for the government to pay the enrollment cost," Dr. Harris stated.

Clinton McGill, M.D., the AMA representative on the panel, said savings in HMO's come from under-utilization not health maintenance, which he described as "an unfortunate term." Dr. McGill said Kaiser Permanente has been confined to relatively low risk groups. Prepaid practice is not an acceptable form of delivery to many people, although it is a legitimate experiment, he told the audience. Even Kaiser officials have urged a go-slow approach and questioned whether universal enrollment is possible or financially feasible. Dr. McGill noted. The position of the American Medical Association, he said, is to study the system and find what it can do and build on its strengths.

George Wheatley, M.D., medical director for Metropolitan Life, noted that Paul Ellwood, M.D., a developer of the HMO concept, has said that businesses interested in HMO's must be prepared to wait five years for a return on a \$10 million investment and to withstand the publicity from possible shoddy public service. Dr. Wheatley questioned whether any of the HMO bills offered sufficient incentives for physicians to participate in HMO's.

John Vencman, Under Secretary of HEW, denied that HMO's would be a stepping stone to socialized medicine. He predicted some 40 million people might be covered by 1980. Concern about socialized medicine should be directed at legislation such as the Kennedy bill rather than HMO's, he said in reply to a question.

Dr. Edward Annis, moderator, said statistics demonstrate that the chief health problems of this country stem from life style — alcoholism, obesity, accidents, etc., rather than health care. He asked how changing the system will improve this.

* * *

Medical care foundations can be set up "at an incomparably lower cost" than closed-panel prepaid group practice and "with maximum acceptance by the medical profession," the American Association of Foundations for Medical Care told Congress.

Urging that HMO legislation specifically embrace foundations, F. William Dowda, MD, president of

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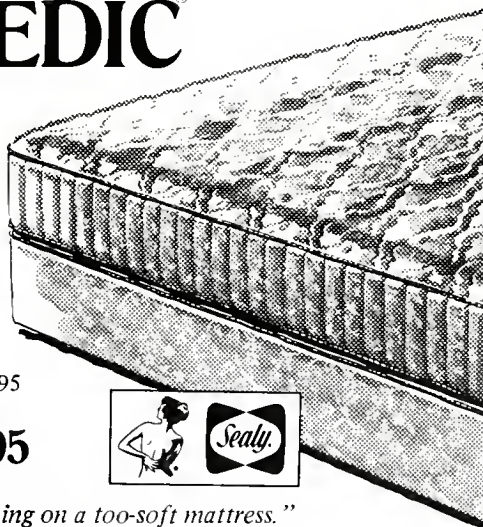
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the Georgia Foundation for Medical Care, said "government should encourage active competition between the major modalities of medical care in every geographical area—stimulating efficiency and permitting comparison between systems."

Testifying before the House Subcommittee on Health, Dr. Dowda said "the Foundation for Medical Care is the most far-reaching, realistic effort that American medicine has made during the past 30 years to meet the needs of the people for better systems of medical care delivery."

The Administration witnesses expressed doubt that one of the principal bills before the subcommittee—introduced by Rep. William Roy, M.D., Kansas Democrat — would cover foundations and urged that it be amended to include foundations as does its own bill. Dr. Roy and other subcommittee members indicated they would make the change.

The HMO bill introduced by Sen. Edward Kennedy (D., Mass.) flatly excludes foundations except perhaps in rural areas.

* * *

The National Health Service Corps has made its first mass assignment of medical personnel to areas short of health services. The program represents the first federal provision of direct care to the medically needy except for special cases such as Indians.

This summer the program will send 152 HEW physicians, 20 dentists, 72 nurses, and 44 other health professionals to some 122 communities, both urban and rural.

The salaries of the health professionals will be paid by the federal government. The young physicians—many fulfilling draft obligations—will draw

between \$12,000 and \$15,000 per year. The patients will be charged fees on the basis of their ability to pay. Funds collected may be retained to provide additional care within the community, or returned to the federal government.

Established under a law signed by President Nixon 17 months ago, the new organization will be headed by H. McDonald Rimple, M.D., who had been serving as acting director.

HEW Secretary Elliot L. Richardson, already engaged in a fight with Congress over whether the Food and Drug Administration will remain in the Department of Health, Education, and Welfare, ordered transfer of the Division of Biologics Standards to the FDA.

Richardson said the transfer would result in an "obvious advantage" through consolidation of the similar activities of the two agencies. He said there was no implied criticism of past performances of DBS. The transfer was effective July 1.

Concerning legislation that would take FDA out of HEW and make it the base of a new and independent consumer safety agency, Richardson said that "it would sell the consumer a phony bill of goods . . . deal the cause of consumer safety a crushing setback . . . abandon the field to exploiters of the consumer by destroying existing mechanisms for regulation."

He said it was "to my complete disbelief" that the Senate Commerce Committee voted 17 to 1 for the independent FDA — consumer safety legislation which runs counter to the Nixon Administration's executive branch reorganization proposal for fewer rather than more government departments and agencies.

Pregnant women are often afflicted with the heart burn. The method of treating this complaint has been already pointed out. They are, likewise, in the more early periods of pregnancy, often harrassed with sickness and vomiting, especially in the morning. The method of relieving these complaints has also been shown. The head-ach and tooth-ach are very troublesome symptoms of pregnancy.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 361.*

Who put the C in Mrs. Murphy's orange juice?

Who did encourage high levels of vitamin C in fruit juices? Who fortified milk with vitamin D? Condemned water pollution way back in 1895? Urged creation of the Federal Food and Drug Administration? Recommended seat belts in 1954?

The AMA. Surprising? Not really. Since its inception, the AMA has worked to protect and improve the public health. In a very real sense, it was the forerunner of consumerism.

Today, the AMA is actively involved in virtually every facet of health care. It is engaged in programs to provide more doctors for slum and rural areas. Programs to solve the problems of drug and alcohol abuse, mental health, malnutrition.

In Washington, the AMA has lobbied successfully for more doctors, maternal and child programs, anti-pollution laws, voluntary national health insurance.

It is financing promising pilot programs such as mobile health vans in Chicago's slums, a drug abuse center in Harlem and a Medex program in Washington state.

The AMA does all these things — and more — for the public health. With your support, we can do even more. Find out more about what the AMA does for the public and you. Send for the pamphlet, "The AMA and the American Doctor: Sharing a Common Goal." Write: Dept. DW, at the address below.

**JOIN US.
WE CAN DO MUCH MORE TOGETHER.**

American Medical Association
535 North Dearborn Street/Chicago, Illinois 60610



**TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
APRIL 1972 AND MOST RECENT 12-MONTH TOTALS**

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE							
	Perinatal Deaths		TOTAL DELIVERIES	PERINATAL RATE PER 1,000 DELIVERIES		Perinatal Deaths		TOTAL DELIVERIES	PERINATAL RATE PER 1,000 DELIVERIES			Perinatal Deaths		TOTAL DELIVERIES	PERINATAL RATE PER 1,000 DELIVERIES		Perinatal Deaths		TOTAL DELIVERIES	PERINATAL RATE PER 1,000 DELIVERIES				
	APRIL 1972	MAY 1971 - APRIL 1972				APRIL 1972	MAY 1971 - APRIL 1972					APRIL 1972	MAY 1971 - APRIL 1972				APRIL 1972	MAY 1971 - APRIL 1972						
NORTH CAROLINA	145	1767	66422	26.6		87	1244	28716	43.3															
ALAMANCE	1	33	1212	27.2		2	21	414	50.7		PENDER		3	169	-		2	149	-					
ALEXANDER	1	14	343	40.8			1	35	-		PERQUIMANS		1	62	-			53	-					
ALLEGHANY		3	127	-				4	-		PERSON		7	278	25.2		8	215	37.2					
ANSON		6	188	31.9		1	13	257	50.6		PITT	1	23	634	36.3		23	648	35.5					
ASHE	1	12	301	39.9				2	-		POLK	1	3	138	-			28	-					
AVERY		10	230	43.5					-		RANDOLPH	1	39	1208	32.3		5	115	43.5					
BEAUFORT		8	396	20.2			13	247	52.6		RICHMOND	2	14	444	31.5		2	12	264	45.5				
BERTIE		5	106	47.2		1	10	237	42.2		ROBESON	1	12	625	29.2		1	64	1713	37.4				
BLADEN	1	4	252	-		1	7	212	33.0		ROCKINGHAM	4	32	1018	31.4		2	26	400	65.0				
BRUNSWICK	1	5	368	13.6			10	162	61.7		ROWAN	1	22	1134	19.4		11	322	34.2					
BUNCOMBE	5	62	1930	32.1		2	16	263	60.8		RUTHERFORD	1	18	666	27.0		1	7	169	41.4				
BURKE	5	23	1028	22.4			8	94	-		SAMPSON	1	8	430	18.6		16	339	47.2					
CABARRUS	2	22	954	23.1			9	318	28.3		SCOTLAND	1	14	312	44.9		2	15	306	49.0				
CADWELL	5	26	1019	25.5			2	76	-		STANLY	1	14	605	23.1		1	10	127	78.7				
CAMDEN		2	54	-				44	-		STOKES	1	8	399	20.1		3	63	-					
CARTERET	1	11	524	21.0			1	82	-		SURRY	2	27	863	31.3		2	51	-					
CASWELL		9	156	57.7			10	172	58.1		SWAIN	2	2	109	-		1	63	-					
CATAWBA	5	51	1493	34.2		1	8	236	33.9		TRANSYLVANIA	1	12	280	42.9		1	1	25	-				
CHATHAM	1	12	340	35.3			5	156	32.1		TYRRELL		1	18	-		4	32	-					
CHEROKEE		5	263	19.0			1	14	-		UNION	1	19	756	25.1		2	23	334	68.9				
CHOWAN		3	85	-			3	105	-		VANCE	1	9	349	25.8		1	17	345	49.3				
CLAY		1	101	-				1	-		WAKE	8	71	2889	24.8		5	44	1143	38.6				
CLEVELAND	2	39	976	40.0		1	17	400	42.5		WARREN		1	73	-		2	10	179	56.9				
COLUMBUS	2	26	537	48.4		2	14	367	38.1		WASHINGTON		1	125	-		16	127	126.0					
Craven	1	28	1192	23.5			18	409	44.0		WATAUGA	1	10	347	28.8		1	6	-					
CUMBERLAND	8	88	3933	22.4		3	57	1638	34.8		WAYNE	4	37	1146	32.3		3	29	631	46.0				
CURRITUCK		2	81	-				46	-		WILKES	2	31	855	36.3		1	3	58	-				
DARE		2	93	-				9	-		WILSON		9	499	18.0		4	19	534	35.6				
DAVISON	4	48	1525	31.5		1	17	243	70.0		YADKIN	1	12	386	31.1		1	29	-					
DAVIE	1	10	295	33.9			3	59	-		YANCEY		5	201	24.9		3	3	-					
DUPLIN		8	395	20.3		2	14	306	45.8		City totals are also included in county totals													
DURHAM	3	41	1287	31.9		5	38	903	42.1		ALBEMARLE		1	139	-		1	2	41	-				
EDGECOMBE		7	395	17.7		3	21	500	42.0		ASHEBORO		2	204	-				26	-				
FORSYTH	2	49	2518	19.5		3	35	1155	30.3		ASHEVILLE	2	20	598	33.4		2	15	236	63.6				
FRANKLIN	1	4	189	-		2	17	245	69.4		BURLINGTON		16	469	34.1		1	5	134	37.3				
GASTON	5	58	2610	22.2		1	23	489	47.0		CHAPEL HILL	1	8	255	31.4		2	57	-					
GATES		2	58	-		1	6	90	-		CHARLOTTE	5	59	2677	22.0		3	85	2038	41.7				
GRAHAM		2	105	-				7	-		CONCORD		8	178	44.9		3	122	-					
GRANVILLE	14	222	63.1			1	18	312	57.7		DURHAM	1	22	760	28.9		4	30	792	37.9				
GREENE	5	80	-	-		2	6	123	48.8		EDEN	1	7	197	35.5		4	58	-					
GUILFORD	11	82	3412	24.0		3	69	1604	43.0		ELIZABETH CITY		4	120	-		3	99	-					
HALIFAX	3	17	392	43.4		2	25	600	41.7		FAYETTEVILLE	1	28	1013	27.6		2	36	623	57.8				
HARNETT	1	12	640	18.8			23	299	78.9		GASTONIA	3	23	710	32.4		1	10	252	39.7				
HAYWOOD	1	16	660	24.2				15	-		GOLDSBORO		6	279	21.5		1	14	264	53.0				
HENDERSON	1	21	691	30.4			1	38	-		GREENSBORO	4	38	1661	22.9		2	45	1031	43.6				
HERTFORD		2	138	-		3	17	254	66.9		GREENVILLE	1	9	251	35.9		5	188	28.6					
Hoke		2	123	-		1	13	241	53.9		HENDERSON	1	5	167	29.9		1	6	147	40.8				
HYDE		3	39	-			3	55	-		HICKORY	1	15	298	50.3		1	5	116	43.1				
IREDELL	1	23	945	24.3		12	331	38.3		HIGH POINT	1	20	738	27.1		1	18	413	43.6					
JACKSON		8	269	29.7		2	65	-		JACKSONVILLE	2	16	370	43.2		2	76	-						
JOHNSTON	3	24	796	30.2		1	17	291	58.4		KINSTON		9	244	36.9		12	227	52.9					
JONES			79	-			1	91	-		LENOIR	2	4	199	-				40	-				
LEE	1	10	411	24.3		3	14	182	76.9		LEXINGTON		12	253	47.4		1	7	87	-				
LENOIR	2	19	545	34.9		21	437	48.1		LUMBERTON		3	213	-		10	207	48.3						
LINCOLN	2	15	537	27.9		4	112	-		MONROE		1	127	-		1	9	106	84.9					
MCDOWELL		12	523	22.9			2	41	-		MORGANTON		6	122	49.2		3	27	-					
MACON	1	4	225	-				8	-		NEW BERN		2	165	-		6	145	41.4					
MAOISON		13	251	51.8				3	-		RALEIGH	3	35	1291	27.1		4	35	607	57.7				
MARTIN	1	4	199	-		1	15	271	55.4		REIDSVILLE	3	6	149	40.3		7	98	-					
MECKLENBURG	6	91	4396	20.7		5	96	2361	40.7		ROANOKE RAPIDS	1	7	193	36.3		3	39	-					
MITCHELL		2	198	-				1	-		ROCKY MOUNT E		1	96	-		1	7	132	-				
MONTGOMERY	1	6	244	24.6			3	122	-		ROCKY MOUNT N		5	210	-		6	108	-					
MOORE		17	458	37.1		2	15	239	62.8		SALISBURY		3	177	-		5	142	35.2					
NASH	3	13	577	22.5		1	12	499	24.0		SANFORD		4	138	-		5	80	-					
NEW HANOVER	4	28	1194	23.5		1	15	454	33.0		SHELBY		8	158	50.6		3	111	-					
NORTHAMPTON	1	3	108	-		1	18	309	58.3		STATESVILLE		4	207	-		6	165	36.4					
ONslow	4	65	2303	28.2			6	426	14.1		THOMASVILLE		7	205	34.1		8	94	-					
ORANGE	1	21	739	28.4			14	218	64.2		WILMINGTON	1	15	523	28.7		13	400	32.5					
PAMLICO		1	81	-			5	66	-		WILSON		3	247	-		8	244	32.8					
PASQUOTANK	1	8	270	29.6			6	180	33.3		WINSTON SALEM	2	21	1168	18.0		3	35	1097	31.9				

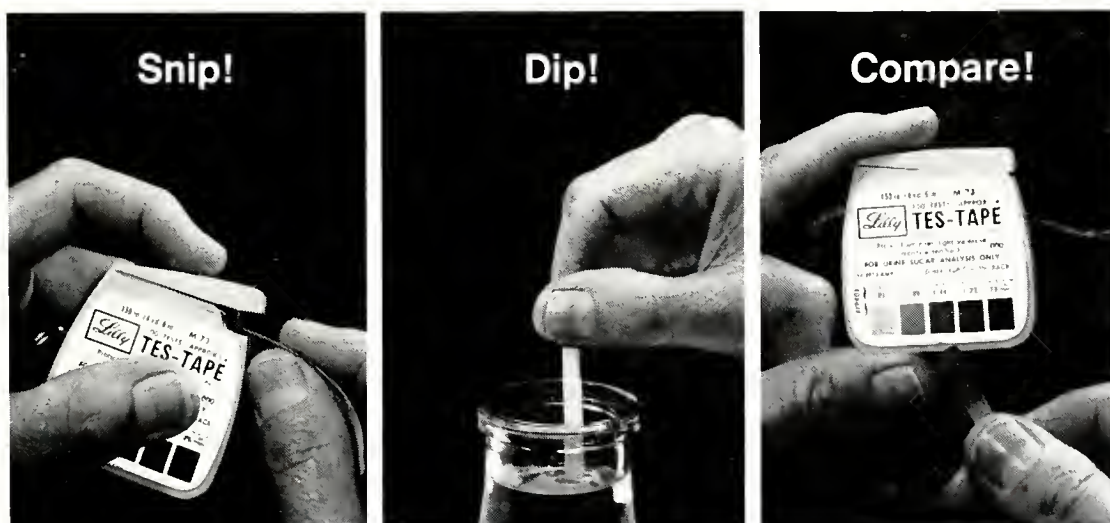
¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more)} + \text{neonatal deaths (under 28 days of life)}}{\text{total live births} + \text{stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

NORTH CAROLINA

Medical Journal

IN THIS ISSUE: Inaugural Address—Directions for 'Seventy-two and 'Seventy-three, John Glasson, M.D.; A Public Health perspective on the Limitation of Births, W. Burns Jones, Jr., M.D. and Jacob Koomen, M.D.; Surgery of the Anatomically Weak and Aging Nose, Carl N. Patterson, M.D.



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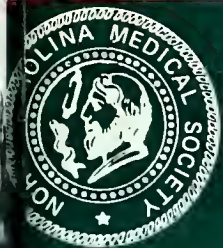
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PRESIDENT'S NEWSLETTER

NORTH CAROLINA MEDICAL SOCIETY

No. 3

August 2, 1972

Re: Biennial Registration of Physicians - The North Carolina Board of Medical Examiners in regular session June 14, 1972, considered the resolution from the State Society about the biennial registration of physicians, along with the suggestions made directly by members of the State Society. As a result of this discussion the Board instructed the secretary to send the registration notice for the biennial registration by November 10 preceding the registration date of January 1. The suspension notice will be sent as in the past, but will be accompanied by a letter explaining the procedure whereby the physician can take care of his registration and thus abrogate the suspension notice.

Memorial Fund for Dr. Robert P. Crouch - The entire North Carolina medical community has been saddened to hear of the recent untimely death on July 18 of our colleague, Dr. Robert P. Crouch of Asheville, N. C. Dr. Crouch, in addition to his busy surgical practice in Asheville, had served as Vice-President of the N. C. Medical Society, as a long-time Councilor from the 10th District of the N. C. Medical Society, and as a physician member of the Board of Trustees of Blue Cross-Blue Shield. Dr. Crouch's family has requested that anyone wishing to make a memorial gift in his memory make such gift to the American Cancer Society.

The Food and Drug Administration on July 5, 1972 announced that the Diapulse Corp. of America has been permanently enjoined from shipping or selling its products in interstate commerce. Diapulse units in possession of a Norfolk, Va. hospital have been seized, and other seizure actions are to be expected from the FDA as the result of a recent court ruling. Over 4,000 diapulse devices have been distributed throughout the U. S., some of them in North Carolina. The diapulse resembles a conventional diathermy machine, but the FDA has concluded that on the basis of laboratory and clinical tests, there are no known therapeutic benefits to be derived from its use. It is felt that some of these machines may be in the possession of physicians in North Carolina, and this is included in the newsletter for their information.

Plans to place limited controls on fees of such professionals as accountants and attorneys will be recommended by the Price Commission. It indicated last May that it was considering the possibility of imposing fee increase limitations on such professionals. It has now voted to do so. Under the plan accountants and attorneys, for example, could increase their fees by no more than 2.5%, but most would be exempt since the guidelines would not apply except to professionals employed by firms having more than 60 employees. Only a small percentage of such professionals are employed by firms of that size. Physicians and dentists do not enjoy such an exemption. Price Commission Chairman C. Jackson Grayson, Jr. said his staff will work out final details. Extension of the fee controls to cover other professionals is expected to occur in August.

The AMA is continuing to support a California physician's lawsuit challenging the Social Security Administration for failure to recognize any increase in his "usual and customary" Medicare fees since 1968. The AMA Board of Trustees voted to contribute \$5,000 to help defray the costs of the court action initiated by Leo Blank, M. D., A Palo Alto radiologist. The Board last year granted \$3,500 to assist Dr. Blank in his case contesting the validity of the 1969 freeze on Medicare

charges, the 75th percentile regulation of 1971, and the administrative policies which delay recognition of charge increases by physicians until the charges have been in effect for one year. Dr. Blank's suit is against SSA, California Blue Shield and the governor of California. A federal District Court last March issued a preliminary injunction ordering CBS to recompute Dr. Blank's fees for a 22-month period beginning in February 1969, and submit them to the court.

The Peer Review Committee of the N. C. Medical Society will meet again at the Committee Conclave in Pinehurst during the last week in September. It will continue its efforts to establish a Foundation for Peer Review in North Carolina. New Hampshire can be added to the list of states who have formed Peer Review Foundations for medical care. Dr. Frank Sohmer of Winston-Salem is Chairman of the Peer Review Committee of the N. C. Medical Society.

The North Carolina Joint Conference Committee on Medical Care is continuing with its deliberations as to the need for the education of medical students in North Carolina and as to recommendations for the best method of carrying out these recommendations. The committee will meet again on August 16 to consider these matters and will hopefully have its final report available for the information of state legislators and for other interested parties including the physicians of N. C. soon thereafter.

Part B Medicare carriers for North Carolina, in connection with negotiations with a North Carolina surgeon, are taking the stance that no additional surgical fee is due the surgeon for extra care of a surgical case which has been complicated by the occurrence of a wound dehiscence. This matter will be taken up by the Insurance Industry Committee at its next meeting. It is of note that the Blue Shield Committee has on previous occasions allowed extra charges as a Blue Shield responsibility in such cases.

The Commission on Professional and Hospital Activities, sponsored by the American College of Physicians, the American College of Surgeons, the American Hospital Association, and the Southwestern Michigan Hospital Council has scheduled a regional workshop to be held in Charlotte, N. C. on September 20 at the Holiday Inn. The N. C. Medical Society is acting as co-sponsor for this program, and it is intended to provide those attending increased access to the current thinking in the medical audit field as far as professional activities in hospitals are concerned.

Acupuncture has now been embraced by the chiropractors, and the N. C. Medical Society has noted several workshops and conferences on techniques of acupuncture sponsored by the chiropractic groups. It is of particular interest that in states where there are legal constraints against injections by chiropractors that the techniques of acupuncture are being adapted, ostensibly producing the same results by the laying on of fingers at the sites where the needles would otherwise be injected.

In view of the recent state-wide publicity concerning the offer of the Aetna Company to defend their policyholders against legal suits by doctors and also in view of the recent negotiations between the Blue Shield Committee of the N. C. Medical Society and N. C. Blue Cross-Blue Shield, the following item is of interest. It is noted that in at least two other states, Blue Shield is said to be offering to make the certificate holder "harmless" should a physician charge more than the company's set reimbursement for each service. A further plan to support the patient by hiring an attorney for defense of the certificate holder has been announced in these two states.

Sincerely and with best wishes,


John Glasson, M. D.
President

Inaugural Address

Directions for 'Seventy-Two and 'Seventy-Three

John Glasson, M.D.

IN his annual address at last year's Annual Meeting, Past President Louis Shaffner exhorted me to "get in the acceleration lane" during the coming year. We have followed his advice and I think we are at cruising speed. Where do we go from here? You have already heard from President Styron at previous sessions an accounting of the busy and eventful year in the history of North Carolina medicine and medical practice, and as tradition would have it, my duty and privilege as your new president is to set some goals and make some projections for the year ahead.

PURPOSES

The purposes of the Medical Society of the State of North Carolina as outlined in its constitution, which was approved at Hot Springs, North Carolina in 1903, are as follows:

The purposes of this Society shall be to federate and bring into one compact organization the medical profession of the State of North Carolina and to unite with similar organizations in other states to form the American Medical Association with a view to the extension of medical knowledge and advancement of medical science; to elevate the standards of medical education and medical service, to promote friendly intercourse among physicians and to enlighten and inform the people with regard to the great problems of medical care and public health so that the profession shall become capable and honorable within itself and more useful in the prevention and cure of disease and in prolonging and adding comfort to life.

How then are we, as members of the North Carolina Medical Society and as citizens of North Carolina, to work with the people of our state in the

coming year to move closer to the accomplishments of these high purposes? What are our assets? Wherein do we excel? And in what respects can we stand improvement?

MEMBERSHIP

As of April 30, 1972, the North Carolina Medical Society had 3,494 active dues-paying members, of whom 3,430 are members of the American Medical Association. In addition, there were 14 honorary members, 17 intern-resident members, 46 student members, and 285 life members, bringing the total current membership to 3,862.

According to statistics recently gathered for the North Carolina Joint Conference Committee on Medical Care in its health manpower studies, there are 3,530 physicians in office-based practice and 1,011 physicians in hospital-based practice in the State of North Carolina, making a total of 4,541 non-federal physicians engaged in patient care.

MEDICAL EDUCATION

According to 1970 U. S. census data, North Carolina had almost exactly 2.5 percent of the nation's resident population. In 1970 there were 160 non-federal physicians in the United States per 100,000 population. North Carolina has 98 physicians per 100,000 population. From these statistics it is easy to see that our state has some catching up to do to match the national average.

Our medical schools, together with many other institutions of higher medical education in the nation, are making valiant efforts to increase the output of physicians. In 1968 the entering class at Bowman Gray numbered 61; this fall 84 students will enter

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Reprint requests to 306 South Gregson Street, Durham, N. C. 27701.

that school, an increase of 38 percent. During the same period Duke University Medical School has come from an entering class of 80 to 114, a 33 percent increase; and the University of North Carolina School of Medicine, from a class of 72 to 110, an increase of 53 percent. East Carolina this fall will have an entering class of 20 students, who upon successful completion of their one-year medical school program, will be eligible for admission to the last three years at the University of North Carolina School of Medicine.

The Social Sciences Research Section of the Division of Health Affairs at the University of North Carolina, under the direction of Dr. Harvey Smith, has made certain projections of the increase in nonfederal physicians in North Carolina. In making these projections, it was assumed that the number of medical students at each of the medical schools would remain at the 1972-1973 level, and that there would be an attrition rate of approximately 10 percent during the four years. It was further assumed that the retention of graduates by the three four-year medical schools would remain at approximately the present level, which overall has been about 35 percent at five years. It was also assumed that the death rate among physicians would remain at about 13 per 1,000 per year. Finally, it was expected that North Carolina would receive 1.28 percent of the graduates of medical schools in other states, and 0.66 percent of foreign medical graduates.

On the basis of these assumptions, North Carolina can expect to have 6,157 nonfederal practicing physicians by 1975 and 7,111 by 1980, an increase of 32 percent over the 1970 figure. Those making the study observed that the projected rate of increase in North Carolina physicians is far in excess of the projected population growth. The number of M.D.'s in North Carolina will increase by one third, while those in the United States as a whole will increase by one sixth. However, the state will not reach national parity by 1980 even at this rate of growth. Variables that affect the projections include additional expansion of existing medical schools and establishment of new schools. We must now train 10 students in order to retain 4.25 graduates in North Carolina.

At the request of the State Medical Society, a subcommittee of the North Carolina Joint Conference Committee on Medical Care has been engaged in a year-long study in an attempt to determine the need for the education of medical doctors in North Carolina, and the best method for attaining these goals. A final report of the study is not yet available, but the committee is attempting to establish reliable and realistic estimates as to the cost of a new medical school and teaching hospital, including its capital outlay and projected annual operating budget. Consideration is also being given to the potential for expanding our existing medical schools and to the prac-

tical limitations to this expansion that may exist. An improved retention rate for medical students might be gained by educating more North Carolinians, and the increased number of North Carolina students at Bowman Gray and Duke may result in such improvement.

DELIVERY OF MEDICAL CARE

Another variable which can affect the need and demand for more physicians is the possible increase in physician productivity through greater use of allied health personnel, including physicians' assistants and nurse practitioners.

Also to be considered are changes in the delivery system through better organization and more efficient use of present resources, changes in the methods of financing health care, and additional public demand for more accessible medical care. The distribution of care, of course, remains a problem in our state as well as in the nation, with rural areas and the economically depressed areas of the central cities being, in many instances, short-changed as far as medical manpower is concerned.

Many suggestions for making health care more widely accessible have been proposed. These include improved regional planning for health care delivery with more emphasis on transportation and communication, new programs utilizing the services of young practitioners who render medical care in lieu of military service, and government programs aimed at improving medical care in rural areas and the "inner cities."

I certainly trust that we will never have to expose doctors to the involuntary servitude implied by some recent suggestions for solving these problems by licensing doctors for practice only in restricted areas, or by permitting medical students to train themselves only in those categories of medical practice where, according to the "health planners," the greatest needs exist.

The North Carolina Medical Society is now holding discussions, through a liaison committee, with the nurses of our state about the role of the nurse practitioner in the delivery of health care. We learn through the press that at the recent meeting of the American Nurses Association note was made of the "great reservoir" of well educated nurses available for patient care, if they can be released from other duties. This news is certainly encouraging and suggests another significant resource for unmet medical care needs. The Society has supported the development of the physician's assistant concept, which has received great impetus from the pioneer program at Duke and is now being implemented throughout the nation in a multiplicity of forms. These efforts to expand medical manpower cannot, of course, be accomplished in one year or several years. I feel that our Medical Society will and should continue to support these efforts and help define the role and

use of these various categories of paramedical personnel in the efficient delivery of medical care.

RESIDENT PHYSICIANS

I should like at this point to recognize especially the role played by M.D.'s in postgraduate training in the delivery of health care in North Carolina and throughout the nation. While nationally the distribution of these physicians has been largely confined to areas around teaching hospitals, an increasing number of community hospitals now have training programs for recent medical school graduates.

Patients have a tendency to refer to all these physicians indiscriminately as "interns." This term does not recognize the advanced degree of competence which many of them possess, and there is now a growing tendency to refer to even the most recent graduates as first-year residents rather than interns. I am totally in accord with this trend.

Medical authorities generally agree that the amount and quality of medical care rendered in institutions which have residency programs are greatly enhanced by the presence of these young doctors. It must also be realized that the senior physicians in our communities will not be there forever, and that when they are gone, the quality of medical care will depend, to some extent, on the quality of training in the delivery of medical care afforded to the recently graduated physician today.

STUDENT MEDICAL ASSOCIATION

During SAMA's twenty-second convention recently held in Los Angeles, the House of Delegates adopted policy statements calling on the organization to work with the American Medical Association and within the medical establishment for "constructive broad-ranging change." The North Carolina Medical Society, as mentioned previously, has welcomed 46 students into full membership, and has considered, in its House of Delegates, a resolution presented by SAMA through the Durham-Orange County Society at this meeting.

CONTINUING EDUCATION

We are beginning to hear stressed throughout organized medicine the importance of continuing education for practicing physicians. It would seem obvious that these efforts toward increased production and availability of health manpower will have a direct influence for good, affording physicians a chance to take advantage of the fine opportunities for continuing education which are available the year round through the many national and state specialty societies, including the American Academy of Family Physicians, and meetings sponsored by organized medicine at all levels. It is my feeling that as health manpower problems become less acute, the offerings in continuing education, some of which are being poorly utilized at present, will become more effective and more popular.

PEER REVIEW

One of the highest priorities for the North Carolina Medical Society for the coming year will, in my opinion, be the establishment of a statewide Medical Society Foundation for Peer Review. Much preparatory work has already been done, and our Peer Review Committee is continuing its efforts to bring this organization into being.

As pointed out previously, efficient and effective peer review, particularly claims review services, has been going on through the State Society — Blue Cross and Blue Shield Committee, the Insurance Industry Committee, the CHAMPUS Committee, the Committee to work with the North Carolina Industrial Commission, and others for a number of years. The State Society, however, has not concerned itself greatly with peer review of the quality of medical practice either in hospital or in office practice. These aspects of peer review are receiving much more attention nationally through programs of the American Medical Association and the efforts of state medical societies, and such foundations are developing rapidly in a large majority of the component state societies at the present time.

It has been pointed out on several occasions by President Charles Styron and others that quality in medical practice is not as common a problem in peer review as are cost and accessibility. It is true, however, that in the deliberations of many of our existing peer review committees, questions of quality in practice, though not widespread, have been among the knottiest of the problems confronted, particularly in terms of their correction when they are found to exist. We have seen in the deliberations of the Insurance Industry Committee during the last several meetings how useful a statewide peer review foundation could be in establishing parameters for the evaluation of medical practice, utilization of hospital beds, and the appropriateness in quality of office practice. These questions of quality have been judged in many instances by profiles set up by third party carriers and fiscal intermediaries, and it is the feeling of many of the committee members as well as many of the insurance industry representatives that state, regional, and national standards of this type would be considerably more useful in the review of those few cases that involve the quality of practice that are considered at the meetings.

The tie-in between the effects of such a foundation on the quality of medical practice and continuing education is obvious. The findings of a peer review committee can easily suggest the location and type of continuing education needed. I believe that by and large these efforts should be educational rather than punitive. If we guard carefully against making them punitive, both the medical practitioner and his patients will benefit. Problems of quality have been spotty in distribution. We have recently noted real problems where third party carriers and

intermediaries have tended to become too involved in practice over the state generally, rather than dealing with the specific bad spots through the good offices of the State Medical Society.

RELATIVE VALUE STUDY

Another area of concern in the work of the North Carolina Medical Society is the work of the little heralded but hard-working committee on the Relative Value Study headed by this year's chairman, Dr. Arthur E. Davis. The revision of the North Carolina Relative Value Study by this committee during the coming year carries a high priority, and I should like to ask especially that the various specialty sections of this Society and the other recognized specialty groups in North Carolina provide maximum cooperation with this committee as it works to complete the new Relative Value Study manual. This manual, as you know, does not set up a fee schedule, but establishes the relative value of all the procedures and types of care given by physicians. It serves as an essential instrument for coding and identifying these procedures and services, and as an aid in billing insurers and fiscal intermediaries for government sponsored medical programs.

The Relative Value Manual can also provide a convenient method by which a physician, by assigning his own conversion factor, can meet federal regulations requiring that he make a list of his charges available to his patients.

THIRD PARTY PAYORS

With the increased involvement of government and third party payors in the practice of medicine, I feel that our medical schools need to give more attention to the role played by organized medicine, through its committee structure, in claims review and peer review of the quality of medical care. It seems to me that the recent graduate who sets up practice in our state knows very little about the administrative avenues available to him through organized medicine as he deals with problems involving third party payors and patients who are treated under various government medical care programs.

An ad hoc committee on third party payors of the State Society is in the process of preparing a manual on this subject for both established physicians and those just beginning practice in North Carolina.

The Committee on Medical Education and the departments of community medicine of the various medical schools might do well to address themselves to this problem.

MEDICAL ASPECTS OF SPORTS

The Committee on the Medical Aspects of Sports has received an increased appropriation for the coming year and will co-sponsor a Governor's Conference on Sports Medicine. The efforts of this com-

mittee in standardizing screening examinations for participants in organized athletics are bearing fruit, and through the committee the Society is pressing toward the goal of adequate medical coverage of school sports events and improved measures aimed at preventing athletic injuries.

MEDICAL EVANGELISM

We have had a good year and an active one in North Carolina medicine under the leadership of President Styron. The large majority of our standing committees have worked hard and effectively, and I anticipate that this spirit will continue during the coming year. Those members who have areas of particular interest in medical care delivery and Society committee work are always welcome to participate, and we invite your letters of recommendation in this regard.

This brings to mind another area of activity which has been adopted by the board of trustees of the American Medical Association, and I should like to dub this activity "Medical Evangelism." Since I became President-Elect, many of my friends have asked me, "How in the world could you ever let yourself get roped into a job like this?" My answer has often been that I belong to my state and county and national medical associations for the same reasons that I belong to and work in the church of my choice in the community where I live. The motivation and attitudes of most of my colleagues who work in organized medicine are, in my opinion, entirely similar.

As one examines this analogy, many parallels appear. First, it is perfectly possible to practice medicine in the community where I live without belonging to or participating in either of these organizations. Second, I feel that both organizations are composed of the major people in my community, and in my sphere of medical practice, those who do extra work, above and beyond the call of duty, for the common good and for the people in the community who need medical care.

I do not believe that my average patient knows, or in most instances is concerned about, what medical organizations I belong to. The doctor who participates in and contributes to the programs of organized medicine has relatively little to gain personally other than the satisfaction of helping. He does it as a part of the necessary joint effort in behalf of the medical care of the community, and often he and his family make great personal and financial sacrifices in behalf of these efforts. He does it as an obligation to provide the knowledge and input which only someone experienced in the delivery of medical care can provide to government, industry, and the general public in all their many common interests, concerning the delivery of medical care.

The efforts of organized medicine, particularly in the field of political action and education, require

money. The church requires money. Many people who become disenchanted with the church and its policies withdraw from it, withdraw their financial support, and contribute nothing to the church family; yet they continue to benefit by the good work the church does. Likewise, those who withdraw from the activities of organized medicine, who withhold their financial support from the educational, administrative, and political activities of the organization will continue to benefit from its efforts while contributing nothing to them.

Many of you have already participated in individual "medical evangelism" with your friends in practice in the towns and cities of North Carolina. It is my hope that during my year as president these efforts will increase. I believe that we can get valuable, constructive criticism from the nonmember physicians who are practicing in our state, and that we can use some of this criticism to the benefit of the State Society and ultimately to the benefit of our patients.

CONCLUSION

Again I want to express my sincere thanks to the some 700 members of the State Medical Society who continue to serve on our 60 active standing committees. I also want to give special thanks to the delegates for their attendance and their time in dealing with the problems of North Carolina medicine; to the commissioners and officers of the Society, and especially to Mr. William Hilliard and the fine headquarters staff, who continue to put full-time effort into those daily tasks associated with the operation of the State Society. I feel that we can look forward to a year of improved communication between the Society membership, headquarters staff, and officers through the recent addition to our staff of Mr. Steve Morrisette, who will work as our newly appointed field representative.

From a personal standpoint, I pledge my sincere and continuing efforts in your behalf. I invite each of you to let me know your concerns and the concerns of your patients so that we can continue to operate an organization dedicated to their best interest.

Every pregnant woman is more or less in danger of abortion. This should be guarded against with the greatest care, as it not only weakens the constitution, but renders the woman liable to the same misfortune afterwards. Abortion may happen at any period of pregnancy, but it is most common in the second or third month. Sometimes it happens in the fourth or fifth. If within the first month, it is usually called a false conception; if after the seventh month, the child may often be kept alive by proper care.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 361.*

A Public Health Perspective on the Limitation of Births

Report of the State Health Director

W. Burns Jones, Jr., M.D.,* and Jacob Koomen, M.D., M.P.H.†

IN keeping with the precedent set in 1971, the report to the Conjoint Session of the North Carolina State Board of Health and the Medical Society of the State of North Carolina will focus on a topic of timely and significant interest. The subject chosen is planned parenthood. Because of the growing concern over population control, it is appropriate to consider this matter seriously, and to share a public health perspective on the limitation of births with the medical profession.

Any discussion of this topic immediately confronts the essayist with a number of terms, about which there is neither general agreement nor general acceptance. Planned parenthood, birth control, family planning, contraception, and other expressions are all widely used, but to many have limits to their usefulness. Some time ago, the word "prevenception" was coined,¹ but apparently it has not gained popularity. It is hoped that, in a broad survey article, one may be forgiven for using terms more or less indiscriminately. However, in a field where there is no consensus about definite terms, interchangeable expressions may be excusable.

These various terms all relate to birth limitation. This limitation may occur prior to conception or after. In this paper, emphasis will be given to the prevention of conception. This is perhaps in keeping with public health's historical attention to prevention. Interruption of pregnancy must nevertheless be part of the perspective. Indeed, today in many countries

such as Japan, abortion is part and parcel of population control.

RANGE OF CONCERN

Birth control may be regarded from several points of view. The most personal, and perhaps of greatest concern to the medical practitioner, is that of the individual. This is a concern shared by public health workers as well.¹ This was reflected in the words of Dr. C. E. A. Winslow 35 years ago: "The mother able to bear children should have adequate prenatal care; the mother able to bear children should have competent . . . obstetrical care; and the woman who is unable to bear children should be protected against the hazards of childbirth."² Today, in both the private and public sector, this concern for conception control for health reasons has been liberalized and extended to recognize "one of the most basic of human rights—that to freely determine the number and timing of one's children."³

A somewhat broader point of view would include the family and the community. The consequences of a large number of children in a household of limited means are well known to public health workers, social service workers, and almost any family doctor. To quote Dr. Winslow again: "The new child itself is one of the chief sufferers in a family that grows too fast for its economic resources. We owe it to future generations that children should not be born into families unable to provide for them homes which ensure a reasonable minimum of physical and mental health."² Even more tragic is the "unwanted child" who suffers abuse or neglect. The entire community becomes involved, with its responsibility for supporting the impoverished family through social services and financial aid.

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On the widest scale, there is some alarm about an overcrowded planet. "People pollution," and the possible breakdown of our life-sustaining ecological systems are matters which cause grave anxiety to many who consider the future. There is considerable worry over at least the deterioration of the quality of our life style, if not even more serious repercussions. The classic author on this subject, the Reverend Thomas Malthus, raised this specter at the turn of the 18th century: "If we multiply too fast, we die miserably of poverty and contagious diseases . . . we have followed these impulses too far, so as to trench upon some other law which equally demands attention."⁴ Discounted for many years, the realization of the exponentially growing problems of an expanding world population (reaching six billion by 1995) has reawakened concern.⁵ Doomsday predictions, the most recent one by the Massachusetts Institute of Technology, raise doubts about the world's ability to sustain itself without catastrophe for another hundred years.⁶

POPULATION TRENDS

It is not within the scope of this paper to examine critically this latter aspect of birth control, much less resolve the controversy. Suffice it to say that limitation of population involves a wide range of concern, from the most intensely personal to the global. Taking a middle-range view, it is relevant to look at some population particulars in the United States and in North Carolina.

Looking at the undifferentiated mass of people, one sees first that our numbers are growing. Using different variables, projections of the population for the United States by the year 2000 lie between 322,277,000 and 271,082,000.⁷ North Carolina may be expected to contain as many as 7,000,000 persons by the same year.⁷ However, a more careful examination reveals significant changes in the characteristics of the population. The reader is referred elsewhere for references to the age distribution of our people, since limitations of space prohibit a detailed statistical analysis.⁸ It will be instructive to look at selected data pertinent to reproduction.

North Carolina has historically shown a substantially higher birth rate than the national average. The graph (Figure 1) shows that these rates are converging. One will also note the variation in birth rates occurring in both the state and the nation: the remarkable decline during the depression years, the postwar "baby boom," followed by the contemporary decline that has again occurred.

Table 1 shows comparative decennial figures from 1920 to 1970 for live births, as well as for fertility ratios.

Table 2 repeats the number of live births, this time to show comparatively the increase in both the number and percentage of illegitimate births — no

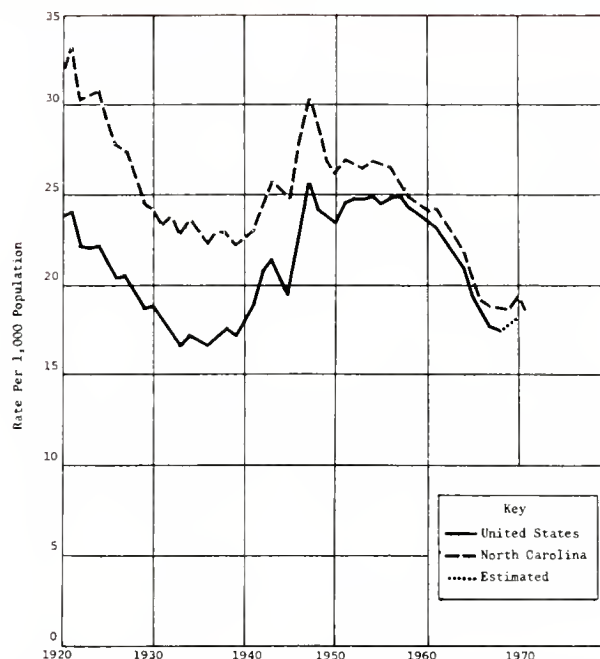


Fig. 1. Annual birth rates: United States and Canada, 1970-1971. (Public Health Statistics Section, North Carolina State Board of Health)

doubt something of a judgment on our current birth control programs.

One comment should be inserted here. Statistics on illegitimate births are still useful in planning public health programs. However, social mores are changing, and the moral judgment that every illegiti-

Table 1
Fertility Ratios, North Carolina, 1920-1970

Year	Births	Population*	Ratio
1920	81,407	574,452	0.1417
1930	76,772	746,005	0.1029
1940	80,455	893,621	0.0900
1950	106,486	959,074	0.1110
1960	109,774	966,427	0.1136
1970	98,455	857,341	0.1148

* Females between the ages of 14 and 44.
Public Health Statistics Section, North Carolina State Board of Health

Table 2
Total Live Births Showing Number and Percent Illegitimate
North Carolina, 1920-1970

Year	Total	Illegitimate Number	Live Births Percent
1920	81,407	4,092	5.0
1930	76,772	5,409	7.0
1940	80,455	6,538	8.1
1950	106,486	8,661	8.1
1960	109,774	9,912	9.0
1970	98,455	12,413	12.6

Table 3
Number and Percent of Live Births
Above Birth Order 4
North Carolina 1920-1970

Year	Number	Percent
1920	26,922	33.1
1930	22,678	29.5
1940	19,684	24.5
1950	20,693	19.4
1960	20,026	18.2
1970	10,846	11.0

mate birth results in an unwanted child, and is an unmitigated evil, is no longer tenable.

Additional illustrations serve to show the changes in family size. Table 3 indicates the steady decline in the number of live births occurring after the fourth child, and substantiates the decrease in popularity of the large family.

The steady decline in the number of persons per household (United States) further documents this trend.

HISTORICAL PERSPECTIVE

An interesting sidelight, prohibited by a desire to keep this essay within reasonable bounds, is the exploration of the history of conception control. The definitive text on the subject, *A Medical History of Contraception*, by Norman E. Himes,⁹ makes interesting browsing. The briefest of excerpts may be permitted: "Man's attempts to control the increase in his numbers reach so far into the dim past, that it is impossible to discern their real origin. Some forms of limitation on the rate of increase are undoubtedly as old as the life history of man."

Dr. Himes points out that, sadly, the major means for population control up until modern times were infanticide and abortion. Although the use of a sheath, or condom, was known for some time (being discoursed upon by the redoubtable Casanova), it was largely for the prevention of venereal disease. Intravaginal devices and medications were at best unacceptable and unreliable until relatively recently. Dr. Alan Guttmacher notes the late arrival of effective, safe conception control procedures developed by medical technology and made available to the public. He states, in the preface to Dr. Himes' history, "The three most important developments in contraception since 1935 are: (1) the more extensive and accurate use of the rhythm method; (2) the development of a modified intrauterine ring; (3) the first truly physiologic method of contraception—the inhibition of ovulation by oral medication."

Coupled with the lack of readily available technology were the constraints limiting the prescriptions and procedures relative to contraception. The judicial overthrow of the restrictive "Comstock laws," occurring in 1936, was a milestone decision that unshackled the hands of the medical profession.⁹ Fur-

Table 4
Persons Per Household:
United States and North Carolina 1920-1970

Year	United States	North Carolina
1920	4.34	NA
1930	4.11	NA
1940	3.77	NA
1950	3.52	3.95
1960	3.29	3.66
1970	3.11	3.24

NA—not available

ther decisions, in 1965 and as recently as March, 1972, have had the same effect on similar state laws.¹⁰ In North Carolina, physicians and public health workers, to say nothing of the public, have been fortunate in being free of restrictive legislation, and in enjoying a relatively liberal climate of opinion regarding contraception.

We would do well to recall that North Carolina took the leadership in developing a statewide, public, planned parenthood program.¹¹ As early as 1932, the North Carolina Conference for Social Services had endorsed such a movement, followed by the North Carolina Federation of Women's Clubs.¹² The practicing physicians of the state have always been in the forefront. The first contraceptive clinic in this state was established privately in 1922.^{*13} The Wake, Forsyth, and Nash-Edgecombe medical societies were the first to endorse public planned parenthood programs.¹²

In March of 1937, a philanthropic grant was made to the state by Dr. Clarence J. Gamble, heir of the Proctor and Gamble Soap fortune and at that time a member of the medical faculty of the University of Pennsylvania.¹¹ This grant enabled the employment of a full-time public health nurse, Miss Roberta Pratt, who worked throughout the state helping local health departments establish birth control clinics. Dr. George Marion Cooper, then Assistant State Health Officer, provided the foresight and inspired leadership that made the program possible. The director of the program, who also had the distinction of presenting the first paper on birth control ever read before the American Public Health Association, was a young man making a name for himself in the public health field: our own Dr. J. W. Roy Norton.¹⁴ County medical societies were quick to endorse and support the new program, thereby ensuring its success.

Since that auspicious beginning, public contraceptive services in North Carolina have grown. Today each of our one hundred counties offers some type of family planning service. In 1970, 31,764 patients were served by county health departments. An additional 5,497 were served by OEO-sponsored proj-

* Unfortunately the available literature does not name the doctor or doctors who established this clinic; otherwise, appropriate credit would be given these pioneers.

ects, while three special projects funded by the National Center for Family Planning Services reached 4,328. Thus, public programs ministered to 41,589 persons.¹⁵

With a major increase in federal financial support, the state's contraceptive services will continue to expand.¹⁵ The Medical Society of the State of North Carolina has reiterated its support of this program.¹⁶

THE PHYSICIAN'S RESPONSIBILITY

The limitation of births is a practice that requires careful and responsible consideration. There are many who reserve personal, social, and religious scruples about contraception. On the other hand, there are those who feel that persons who are judged socially or morally irresponsible should be restrained from bearing children by legal mandate, if necessary. Further, physicians must be prepared to remind society that reproduction is not a disease, but a normal and even desirable physiological process. Indeed, the physician has perhaps had to make the greatest adjustment; until quite recently, the risks of pregnancy and childbirth were such that medical tradition and ethics taught that salvage of the products of conception had the highest priority. Doctors were too busy keeping mothers and babies alive to be concerned with overpopulation, and even the risk of defective children was no justification for fetal destruction. Now, the medical profession must temper its concern for preservation of life, without reservations, with concern both for the quality of that life and the impact of an increasing number of lives upon our ability to remain viable as a society. In this light, the question of unrestricted abortion will continue to vex us.

A reference to C.-E. A. Winslow may be helpful: "The primary dictionary definition of 'control' is

'power of directing, command.' This is the sense in which we must use the term. 'Control' should imply intelligent and purposeful adjustment of the life of the individual and the community to its physical and social environment. 'Birth control' should imply protection against conception when the coming of a child would be detrimental; but also the provision of expert advice to the considerable group of persons who desire more children than they have."²

In spite of these sobering thoughts, the principle of contraception is generally that of bringing good. It is a personal good, which the privately practicing physician may bring to his patient. It is also a public good, and in that it confers well-being upon the public, it becomes part of the responsibility of public health. Through a continuing partnership between the public and private sectors, this benefit can and should be extended to all who need and want it.

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Women of a gross habit, at [menopause], have often ulcerous sores break out about their ancles, or in other parts of the body. Such ulcers ought to be considered as critical, and either suffered to continue open, or have artificial drains substituted in their stead. Women who will have such sores dried up, are often, soon after, carried off by acute diseases, or fall into those of a chronic nature.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 360.*

Surgery of the Anatomically Weak and Aging Nose

Carl N. Patterson, M.D.

THE long-term results of septal surgery for maintaining an adequate airway have not been good. A review of patients operated on 15 to 25 years ago will disclose too many subsequent complaints of repeated nasal obstruction. In many cases the effects of aging on an anatomically weak nose is the cause of this problem.

In order to prevent the problem, it is necessary to recognize the anatomically weak nose and correct the defects. The stability of the cartilaginous nose must be increased, and yet its flexibility must be maintained. The facial signs of aging are deepening wrinkles, baggy eyes, sagging jowls, flabby wattles, and droopy nose. With aging, the mobile portion of the nose droops, the lower lateral cartilages seem to rotate downward, the splayed feet of the lower lateral cartilages become more divergent, and the columella retracts. Hence the frequent remark by the patient, "Doctor, if I raise the tip of my nose, I breathe fine."

One has only to look at the pictures of a child, an adult, and an old person to see these effects of the aging process (Fig. 1). Most noses that have a septolabial angle of 90 degrees or less at 40 years of age will, in all likelihood, have some nasal obstruction at the age of 65, regardless of the condition of the septum. Hence the elderly person acquires varying degrees of nasal obstruction even if he has no septal problem.

On accepting a patient for corrective nasal surgery, the rhinologist should not confine his thinking to the present, but plan for the future. I do not

accept a patient for nasal surgery unless he agrees to all the corrections of nasal deformities necessary to restore physiology. The improvement of nasal physiological function is the principal purpose of corrective procedures; the improvement in appearance is secondary. As stated previously, it is necessary to increase the stability and yet maintain the flexibility of the nose. This goal is achieved by (1) a septoplasty that preserves almost all of the cartilaginous septum; (2) a repositioning and remodeling of the upper and lower lateral cartilages; and (3) a bony rhinoplasty when necessary, to bring all the internal and external structures into proper alignment.

SURGICAL NASAL ANATOMY

The mobile portion of the nose is made up of the upper and lower lateral cartilages, the quadrilateral cartilage, the skin, and soft tissue. The nasal septum may be divided, for surgical purposes, into two compartments by an imaginary dorsoventral line beginning at the caudal border of the upper lateral cartilage as it is attached to the septum and extending to the maxillary crest dorsally. That part lying above this plane is called the cephalic compartment, and that below, the caudal. Deviations in the latter compartment are properly handled by septoplastic techniques.

Metzenbaum,¹ Galloway,² Foman and others,³ Becker,⁴ Goldman,⁵ and Cottle and others⁶ have described various methods of approach to caudal septal deformities. For the past 15 years I have used a technique that has produced satisfactory results in a high percentage of cases. It preserves the stability of the nose while maintaining its flexibility. The latter

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Fig. 1. Note the downward turn of the lobule, retraction of the columella, shortening of the upper lip, and appearance of a slight dorsal hump in the aging nose.

factor is most important, for a partially fixed or rigid nose is unsatisfactory to the patient and detracts from normal facial mobility.

PHYSIOLOGICAL NASAL SURGERY

The nose conditions the inspired air by warming, humidifying, and cleansing it. In this time of increasing air pollution the normal nose is frequently overworked. When deformities that impair the efficiency of this important organ occur, respiratory problems increase. The properly functioning nose plays a significant role in cardiac and pulmonary problems.

When a negative pressure is created by expansion of the chest cage, air rushes into the nose, and its pathway is determined by the configuration of the external and internal structures. In a normal nose the air follows a parabolic curve across the middle and upper turbinates to reach the nasopharynx (Fig. 2). In expiration the same pathway is followed except that, owing to the slightly smaller size of the anterior choana, eddy currents are set up.

The nose is in a constant state of rhythm. Its two sides are never wide open. Since the nose must work 24 hours a day, it must have rest. Hence one side swells slightly because of vasodilation; the other side contracts and does the principal air condition-

ing. In 15 to 30 minutes the roles are reversed. This alternation from side to side can be likened to the balance in the laboratory.

In a nose with deviations of the cartilaginous structures, sagging of the lobule, and retraction of the columella, the airway is significantly altered (Fig. 3). In order to correct this deformity, it is necessary to elevate the tip and strengthen the columella as well as correct the septal deformities.

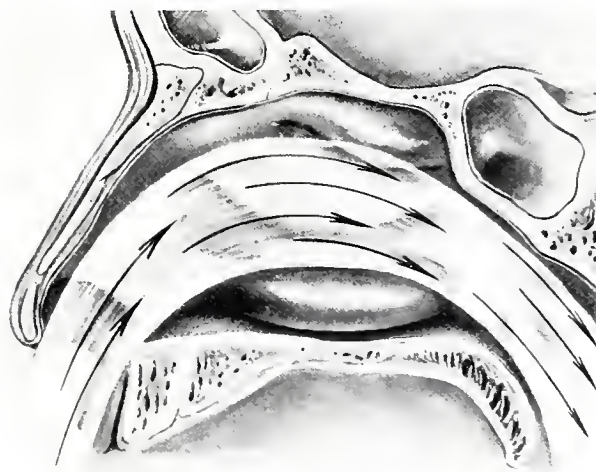


Fig. 2. The normal inspiratory air pathway.

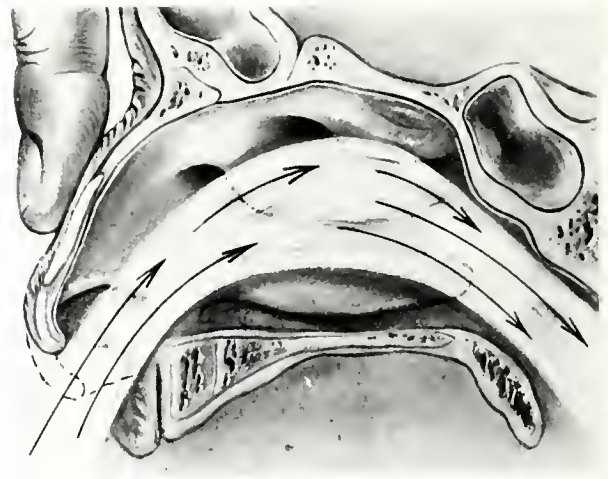
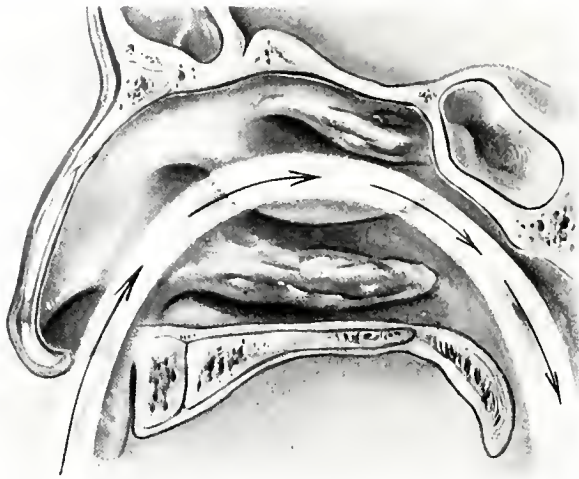


Fig. 3. A. Alteration of the inspiratory air current in a drooping tip with retraction of the columella. B. Restoration of normal inspiratory pathway by elevation of the cartilaginous nose.

If only the septal deviation is corrected, the other deformities will likely increase with aging and produce obstruction of the nasal airway.

SEPTOPLASTIC TECHNIQUE

An incision is made on the side of the principal deflection (the convex side) along the caudal border of the septum and extended down to the anterior nasal spine, then across the floor of the nose. The mucoperichondrium is completely elevated on this side. The mucoperichondrium is then elevated along the floor of the nose, extending medially underneath the anterior nasal spine and maxillary crest, thus creating a superior and an inferior tunnel. The two tunnels are then joined, under direct vision, by resecting a 2 to 3 mm wedge of cartilage. The cartilage is transected cephalic to the caudal mar-

gin of the upper lateral cartilage as it attaches to the septum. The mucoperichondrium and periosteum are elevated on the opposite side, and then posterior bone and cartilage are removed or repositioned as necessary.

The remaining caudal septal strut, to which mucosa is still attached on one side, is cut into four segments by resecting 1-2 mm struts. When necessary, additional thinning is achieved by shaving and cross-hatching to break the spring of the cartilage. In this procedure approximately 70 percent of the cartilaginous septum is preserved. Excessive redundant mucosa is resected from the convex side to put the flap under slight tension and help prevent a recurrence of the deformity. A bunching suture is tied on the side opposite the convexity to further insure maintenance of the septum in its new position. Poly-

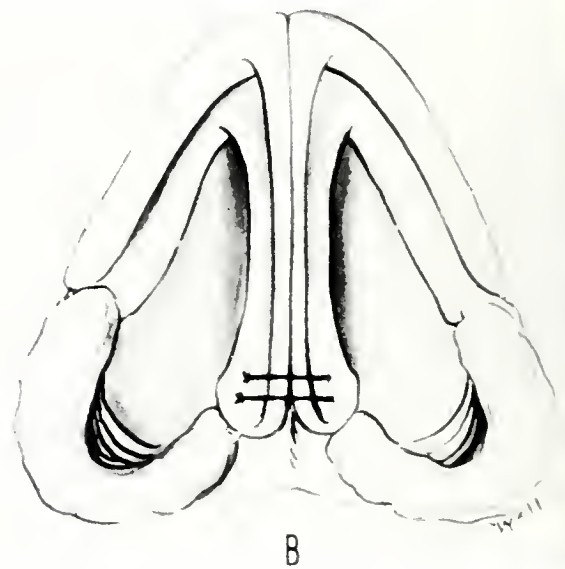


Fig. 4. The stability of the nose is increased by suturing together the splay-footed medial crura at their base.

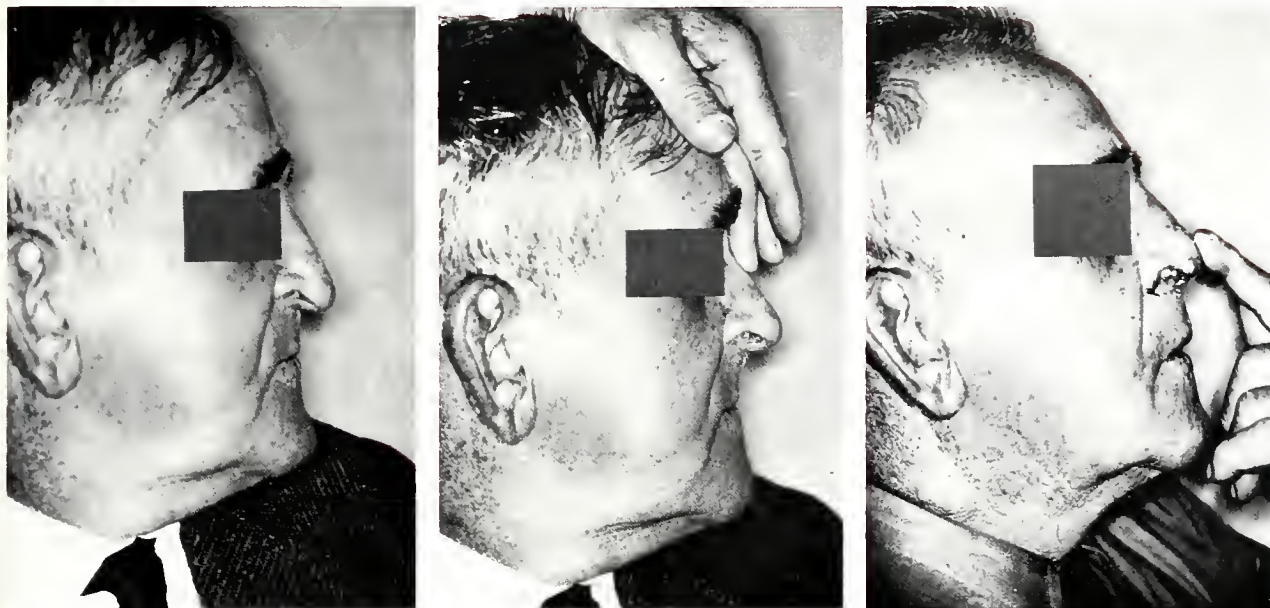


Fig. 5. A. Preoperative photograph showing drooping of the lobule with a septolabial angle of less than 45 degrees. **B.** Observe improved tip angle by simple upward rotation of the soft tissues. **C.** Photograph taken seven days after operation. Observe septolabial angle and nasal shortening.

ethylene splints are sutured on each side to the septum to keep it stable for ten days.

The medial crura are important structures in maintaining the stability of the nasal tip. In some cases they are in a weak position, and when caudal septal deformities cause additional displacement, the tip of the nose is quite weak. Descriptions of the position of the medial crura in anatomy books vary. They are most frequently described as extending about two-thirds of the way down the columella. Actually they often extend the full length of this structure, then diverge in a splay-footed fashion. One has only to take a forceps and squeeze these divergent feet together and then palpate the nasal tip to realize the increased stability gained by re-

positioning and suturing them together at the base (Fig. 4). To give additional support, two homologous cartilage grafts are placed in front of the medial crura from the nasal spine to the apex of the tip. The two grafts can move on each other and allow normal flexibility, at the same time increasing stability.

The lateral crura of the lower lateral cartilages frequently rotate downward in the weak and aging nose. This deformity is corrected by resecting 2 to 4 mm of the cephalic border of the lateral crus by the cartilage-splitting incisions, which preserve the vestibular skin and do not violate the region of the limen nasi. Deformities of the ala and bony pyramid are corrected as necessary to produce a complete



Fig. 6. A. Observe lateral deviation of the bony and cartilaginous structures plus the early signs of aging (drooping tip and retracted columella). **B.** Postoperative photograph showing cosmetic improvement and a strong nasal structure which will change little with age.



Fig. 7. A. Before operation. An external nasal deformity indicating a structure that is basically weak. With aging the patient would experience some degree of nasal obstruction regardless of the condition of the septum. **B. Postoperative views** showing physiological and cosmetic improvement.



realignment of the deformed structures. Thus the complete procedure corrects all deformities that play a role in nasal obstruction and provides for the future sagging of the weak or aging nose.

REPORT OF CASES

Four cases are presented to illustrate three basic groups of nasal deformities.

Group 1

Patients in this group have both internal and external deformities to such a degree that total restoration of the nose is necessary to restore a satisfactory nasal airway. These patients readily accept an improved cosmetic result, but this is not the reason they come to the physician. Many of them are between the ages of 35 and 50 years and are not at all interested in altering the appearance of the nose. However, when external deformities prevent the

proper alignment of the structures, they must be corrected.

Case 1 (Fig. 5): A 55-year-old man complained of nasal obstruction since childhood. In the last ten years the lobule of the nose had become enlarged and the tip had drooped, producing almost total obstruction. Examination showed a large lobule with many superficial dilated blood vessels. The tip drooped and the columella was retracted, making a septolabial angle of less than 45 degrees. There was subluxation of the septum into the right naris and concomitant deviation of the left naris in the region of the limen nasi, obstructing both sides of the nose. A combined septonaso-plasty produced functional and cosmetic improvement. Surgery confined to the septum could not have restored this man's nasal airway. The tip of the nose had to be elevated.

Group 2

Patients in this group have septal deviations and associated external nasal deformities that do not require external correction to produce a temporarily adequate airway. However, the basic structure of the nose is weak, and with age the tip will droop,



Fig. 8. A. Observe the beginning downward rotation of the lobule plus the lateral deviation of the bony and cartilaginous nose before operation. **B.** Physiological improvement was obtained by realigning the internal and external nasal structures and augmenting the chin.

so that once again the airway will be inadequate. These deformities are too often unrecognized, and worse, nasal obstruction will develop in later years if a liberal septal resection is performed without correction of the external deformities.

Continued oral breathing, shortness of breath, disturbed sleep, and easy fatigability are common symptoms and complaints of older people. A poor nasal airway can produce cardiac stress and incomplete pulmonary ventilation. Today, chronic cardiac and respiratory diseases are rapidly increasing. Therefore, it behooves the rhinologic surgeon to assess and correct carefully all deformities of both the external as well as the internal nose, so that in subsequent years the patient will maintain a good nasal airway.

Case 2 (Fig. 6): A 47-year-old woman had sustained an injury to her nose in childhood which resulted in an external and an internal deformity. Nasal obstruction had progressed in the last few years. Examination revealed deviation of the external cartilaginous and bony nose to the left, and a moderate-sized dorsal hump. There was early sagging of the lobule and retraction of the columella. The feet of the medial crura were divergent and the columella was widened, producing irregular nares. The caudal end of the septum projected into the left naris, with an angle of deflection to the right side obstructing 90 percent of the breathing space. A complete rhinoplasty and septoplasty corrected the internal and external deformities. Had only septal surgery been performed, with aging the tip would have continued to droop, the columella would have continued to retract, and the dorsal hump would have become more apparent. Having been made more stable by the procedure, the nose will change little with increasing age.

Group 3

Patients in this group also have basically weak external nasal structures which will sag or droop with age. One of the presenting complaints of our patients has been difficulty in breathing. Septal procedures were performed on all patients, but they were equally or more interested in the cosmetic result.

Case 3 (Fig. 7): A 23-year-old woman complained of difficulty in breathing through the nose and of external nasal deformity since adolescence. She had had nasal allergies which had been well controlled by a regular program of desensitization. Examination showed a moderate-sized bony hump, slight saddling of the upper lateral cartilage, widening of the lobule, and separation of the medial crura of the lower lateral cartilages. Internally, the septum showed a sigmoid deviation partially obstructing the breathing space. A combined rhinoplasty and septoplasty produced a satis-

factory physiological and cosmetic result. If uncorrected, this patient's anatomically weak nose would become increasingly deformed with age.

Case 4 (Fig. 8): A 36-year-old woman had experienced increasing nasal notably obstruction, especially during the past five years. Her external nose had been crooked since adolescence. Examination disclosed a moderate-sized bony and cartilaginous hump. There was a disparity in length between the sides of the bony pyramid. There was a prominent anterior nasal spine and subluxation of the caudal septum into the right naris, with an angle of deflection into the left airway in the region of the limen nasi. The patient's moderately receding chin accentuated her nasal deformity. Combined rhinoplasty and septoplasty improved her nasal function and appearance. Augmentation of the chin with a silastic implant greatly improved her appearance by contributing to the overall softening of her facial features.

COMMENT

The reason for poor long-term results of septal surgery in many cases is the failure to recognize and correct all the factors involved in the deformities. Many noses are anatomically weak, and when the effects of aging are superimposed, the nasal airway will become obstructed regardless of the position of the nasal septum.

SUMMARY

Reconstructive nasoseptoplasty is performed to restore nasal physiology and prevent subsequent problems by correcting all anatomical deformities. Cases exemplifying certain types of deformities and their correction are presented.

Acknowledgement

The author is grateful to Dr. Millar of the Department of Pathology, Duke Hospital, who supplied the autopsy findings and the slides for the cases presented; and to Mrs. Jean Boykins, Mrs. Ruby Etheridge, Miss Ruth Hales, and Mrs. Fannie Simpson for their valuable assistance.

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Pregnancy is not a disease, yet that state is often attended with a variety of complaints which merit attention, and requires the assistance of medicine. Some women indeed, are more healthy during their pregnancy than at any other time; but this is by no means the general case; most of them breed in sorrow, and are frequently indisposed during the whole time of pregnancy. Few fatal diseases, however, happen during that period; and hardly any, except abortion, that can be called dangerous.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 360.*

Editorials

SUGGESTIONS FOR AUTHORS

The NORTH CAROLINA MEDICAL JOURNAL welcomes original contributions to its scientific pages, expecting only that they be under review solely by this JOURNAL at a given time, and that they follow a few simple guidelines. The guidelines are as follows:

1. Subject Matter

Educational articles, especially those in which particular applications to the practice of medicine in North Carolina are developed, are one of the main objectives of this JOURNAL.

Articles reporting original work by North Carolina physicians are invited, whether the work is done in a clinic, a laboratory, or both. The editor and his consultants will evaluate the work by the usual criteria, including a proper discussion of previous work, control observations, and statistical tests where indicated.

Historical articles, especially those dealing with local history, are considered of real value and interest.

2. Manuscripts

An original and a carbon copy of the manuscript should be submitted, one for review by the editorial staff, the other by referees. The manuscript should be typed on standard-size paper, double-spaced, with wide margins (one inch on each side).

3. Bibliographic References

References to books and articles should be indicated by consecutive numerals throughout the text and then typed, double-spaced, on a separate page at the end of the manuscript. Books and articles not indicated by numerals in the paper should not be included.

References will be much more valuable to the reader if they are given in a proper form and contain the full information necessary to locate them easily. The NORTH CAROLINA MEDICAL JOURNAL follows the form used in the journals of the American Medical Association and the *Index Medicus*, giving the author's surname and initials, title of the article, name of the periodical, volume, inclusive page numbers, and the date of publication. It is believed that this style makes it easier for the reader to judge whether the reference is likely to prove useful to him, and enables him to locate it more quickly.

4. Tables and Illustrations

Tables and legends for illustrations should be typed on separate sheets of paper. The illustrations should be glossy black-and-white prints or line drawings. It is necessary to ob-

tain permission from the author or publisher to reproduce illustrations which have been published elsewhere. Costs in excess of \$15.00 for illustrations are borne by the author. Costs for setting of tables are also borne by the author as are charges for art work which might be needed for proper printing of figures.

5. Style

The style followed by this JOURNAL will be, in general, that outlined in the Style Book issued by the Scientific Publications Division of the American Medical Association, John H. Talbot, M.D., director. All manuscripts are subject to editorial revision for such matters as spelling, grammar, and the like.

By following the above suggestions, writers will greatly expedite the publication of papers accepted by the NORTH CAROLINA MEDICAL JOURNAL.

NORTH CAROLINA SCORES AGAIN AT SAN FRANCISCO

Four years ago at the 1968 annual meeting of the A.M.A. in San Francisco, Dr. John Robert Kernodle became the first North Carolina physician to achieve election to the Board of Trustees of the A.M.A. True, Dr. Wingate Johnson, former long-time editor of this JOURNAL, served two years of an unexpired term by appointment in 1947.

John Kernodle's performance as a member of the board assured his re-election as a trustee in 1971 and his selection as vice-chairman. During the past year he has represented the A.M.A. and the profession in many quarters so effectively that at the 1972 annual meeting in San Francisco in June, he was elevated to the chairmanship of the Board of Trustees.

Broad perspective acquired by tireless involvement in all facets of organized medicine in this state and on the national scene fully qualify John Kernodle for this new responsibility. It is an opportunity to render distinguished service to the health care system at a critical time for medicine, and to reflect credit upon his home state.

J. S. R



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WHAT? WHEN? WHERE?

In Continuing Education August, 1972

I. Current Events in North Carolina September 9

Symposium on SMA 12/60
Place: Babcock Auditorium, Bowman-Gray School of Medicine, Winston-Salem

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman-Gray School of Medicine, Winston-Salem, 27103

September 14-15

17th Annual Angus M. McBryde Newborn Symposium
Place: Duke University Medical Center, Durham
For Information: Dr. George W. Brumley, Division of Perinatal Medicine, Box 2911, Duke University Medical Center, Durham 27710

September 15-16

1972 Walter L. Thomas Symposium on Gynecological Malignancy and Surgery

"Why Cancer Treatment Fails and Its Subsequent Management, Hormonal Aspects of Endometrial Cancer and Urinary Incontinence Problems"

Place: Duke University Medical Center, Durham

Open to: Practitioners and residents in Obstetrics and Gynecology

Sponsored by: Department of Obstetrics and Gynecology, Duke University Medical Center

For Information: William T. Creasman, M.D., Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, 27710

Sept. 27-Oct. 1 (Note correction from May listing)

State Medical Society Committee Conclave

Place: Mid Pines Club, Southern Pines

For Information: Mr. William N. Hilliard, Executive Director, Post Office Box 27167, Raleigh, 27611

October 6

Forsyth County Heart Association Symposium

"Left Ventricular Outflow Obstructive Disease"

"The Detection of Cardiovascular Disease of Children in Office Practice" Speaker — Mary Allen Engle, M.D.

"Myocardial Revascularization — The Cleveland Clinic Experience"

"The Surgical Mission of Myocardial Revascularization" Speaker—Donald B. Effler, M.D.

"Pathological Findings in Pre-Hospital Deaths Due to Coronary Atherosclerosis"

"The Geographic Pathology of Coronary Atherosclerosis" Speaker—Robert Foster Scott, M.D.

Place: Holiday Inn West, Winston-Salem

Sponsored by: Forsyth County Heart Association

For Information: Mrs. Katherine J. Cox, Executive Director, Forsyth County Heart Association, 2046 Queen Street, Winston-Salem, 27103

October 12-13

Annual Alumni Meeting, Distinguished Alumni Lectures, Scientific Session

Place: Babcock Auditorium, Bowman-Gray School of Medicine, Winston-Salem

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman-Gray School of Medicine, Winston-Salem, 27103

October 16-17

Joint Meeting of N.C.-S.C. Societies of Ophthalmology and Otolaryngology

Place: Blockade Runner Motor Hotel, Wrightsville Beach
For Information: Banks Anderson, Jr., M.D., N.C. Society of Ophthalmology and Otolaryngology, Duke University Medical Center, Durham, 27710

October 25-27

Fourth Annual Radiology and Nuclear Medicine Postgraduate Course

Place: Duke University, Durham, 27710

Presented by: Department of Radiology at the Duke University Medical Center



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References: 1. Olsen, J.R. *Journal-Lancet* 85: 287 (July) 1965. 2. Giorlando, S.W.: *Obst. Gyn. Dig.* 13: 32 (Sept.) 1971. 3. Decker, A.: *Case Reports on File, Medical Department, Julius Schmid* 4. Giorlando, S.W., Torres, J.F., and Muscillo, G. *Am. J. Obst. & Gynec.* 90: 370 (Oct. 1) 1964. 5. Lechevalier, H. *Antibiotics Annual 1959-1960* New York, Antibiotics Inc., 1960 pp 614-618. 6. Friedel, H.J.: *Maryland M.J.*, 15:36 (Feb.) 1966.



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October 26

Raleigh Academy of Medicine 24th Annual Clinical Symposium. Topic: Clinical Pharmacology, Toxicology, and Drug Interaction

Place: Sir Walter Hotel, Raleigh

For Information: B. B. Ferdon, M.D., Program Chairman, Raleigh Academy of Medicine, 119 N. Boylan Avenue, Raleigh, N. C. 27603

November 17-18

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and The North Carolina Pediatric Society

Place: The Carolina, Pinehurst

For Information: Mrs. John McLain, 3209 Rugby Road, Durham, 27707

II. Coming Events in North Carolina

December 8-9

Second Annual Reynolds Seminar in Medicine: Myocardial Infarction, 1972

Place: Babcock Auditorium, Bowman-Gray School of Medicine, Winston-Salem

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman-Gray School of Medicine, Winston-Salem, 27103

January 26-27, 1973

Third Annual Surgical Symposium: Surgical Emergencies
Place: Babcock Auditorium, Bowman-Gray School of Medicine, Winston-Salem

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman-Gray School of Medicine, Winston-Salem, 27103

III. Out of State (through November, 1972)

August 16-18

Clinical Decision in Cardiology—3 days in Cardiology
Place: Holiday Inn, Myrtle Beach, S. C.

Sponsors: American Heart Association, Council on Clinical Cardiology; Duke University Medical Center; N. C. Heart Association

Fee: \$60, Fellows & members; \$100 non-members of Council on Clinical Cardiology

For Information: American Heart Association, Council on Clinical Cardiology, 44 E. 23rd Street, New York 10010

September 18-20

American Academy of Orthopaedic Surgeons Course: "Orthopaedic Nursing"

Place: Atlanta, Georgia

For Information: Joseph H. Dimon, III, M.D., 1938 Peachtree Road, N.W., Atlanta, Georgia 30309

September 22

One day seminar on the Latest Technics and Developments in Nuclear Medicine

Place: Self Memorial Hospital, Greenwood, S. C.

Sponsored by: South East Chapter of the Society of Nuclear Medicine, Department of Radiology of Self Memorial Hospital, The South Carolina Regional Medical Program, and the Division of Continuing Education of the Medical University of South Carolina

Registration fee: \$15

For Information: Vince Moseley, M.D., Director, Division of Continuing Education, Medical University of South Carolina, 80 Barre Street, Charleston, South Carolina 29401

September 25-29

Basic Mechanisms in Internal Medicine

Place: Medical College of Virginia, Div. of Health Sciences
Richmond, Va.

Tuition Fees: ACP Members and Fellows, \$80; Nonmembers, \$125; Associates, \$40; Other Residents and Research Fellows, \$80

For Information: Registrar, Postgraduate Courses, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104

October 12-14

American Academy of Orthopaedic Surgeons Course, "Surgery in Rheumatoid Arthritis"

Place: Atlanta, Georgia

For Information: F. James Funk, Jr., M.D., 1938 Peachtree Road, N.W., Atlanta, Georgia 30309

October 16-17

Tennessee Valley Medical Assembly

Place: Read House, Chattanooga, Tennessee

For Information: Guy M. Francis, M.D., Chairman, 960 East Third Street, Chattanooga, Tennessee 37403

October 16-18

American Academy of Orthopaedic Surgeons Course, "Neuromuscular Problems of Childhood"

Place: Charlottesville, Virginia

For Information: Warren G. Stamp, M.D. and Wilton H. Bunch, M.D., University of Virginia Hospital, Charlottesville, Va. 22901

October 27-28

Regional Meeting, American College of Physicians

Place: Sheraton Motor Inn, Memphis, Tennessee

For Information: Hall S. Tackett, M.D., 910 Madison Avenue, Memphis, Tennessee 38103

November 4

Georgia Regional Meeting, American College of Physicians

Place: Grady Hospital, Atlanta, Georgia

For Information: Edwin C. Evans, M.D., 340 Boulevard, N.E., Atlanta, Georgia 30312

November 30-December 1

South-Wide Symposium on Human Nematode Intestinal Parasites

Place: Atlanta, Georgia

Sponsored by: University of South Carolina

For Information: James W. Follette, Project Assistant, Malnutrition and Parasite Project, 002 Maxcy College, University of South Carolina, Columbia, South Carolina 29208

Send information for listing to WHAT, WHEN, WHERE, Box 8248, Durham, North Carolina, 27704. To be listed in a specific issue, information must be received by the 10th of the preceding month. Issues are scheduled for appearance on the 15th of each month.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE

WAKE FOREST UNIVERSITY

Dr. N. Sheldon Skinner Jr., professor of medicine and director of the Division of Clinical Physiology at Emory University School of Medicine, joined the faculty of the Bowman Gray School of Medicine July 1 as professor and chairman of the Department of Physiology.

He succeeded Dr. Harold D. Green, who has headed the department for the past 27 years. Dr. Green will remain on the faculty as professor of physiology and will continue his activities in teaching, research, and patient care.

Dr. Skinner, a former member of the faculty of the University of Texas, Southwestern Medical School, Dallas, was appointed to the Emory faculty in 1968. His research interests are in the area of cardiovascular physiology.

A graduate of Auburn University, he holds the M.D. degree from the Medical College of Alabama where he was elected to Alpha Omega Alpha. He took postdoctoral training at the Medical College of Alabama, Yale Medical Center, and the National Heart Institute.

* * *

Recently appointed to the full-time faculty of the Bowman Gray School of Medicine were Dr. James A. Chappell, associate professor of community medicine and associate in pediatrics; Dr. David H. Fuller, Jr., assistant professor of psychiatry; Dr. G. Joseph Poole, assistant professor of radiology (neuroradiology); Dr. John L. Schultz, assistant professor of radiology; Dr. Donald E. Schwarten, assistant professor of radiology (cardiac radiology); Dr. Duke

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B. Weeks, assistant professor of anesthesia; and Dr. Edward S. Beason, instructor in surgery (plastic surgery).

Also, Charles L. Beck, instructor in pediatrics (social work); Dr. James E. Crowe, instructor in radiology; Mrs. Barbara D. Erwin, instructor in pediatrics (child development); Miss Tamara Kay Hahn, instructor in pediatrics (speech pathology); Mrs. Mary Ann Hayes, instructor in pediatrics (psychology); Miss Sara Lee Ludlum, instructor in pediatrics (social work); and Dr. Brooks E. Neff, Jr., instructor in otolaryngology (audiology).

Receiving appointments to the part-time faculty were Dr. Khusron Bahrani, clinical instructor in psychiatry; Dr. William C. Bostic, clinical instructor in orthopaedic surgery; Dr. R. Perry Clark, clinical instructor in obstetrics and gynecology; Dr. Robert M. Dacus III, clinical instructor in obstetrics and gynecology; Dr. William S. Farabow, clinical instructor in obstetrics and gynecology; Dr. Paul Geniec, clinical instructor in otolaryngology; Dr. Norman H. Leake, adjunct associate professor of pharmacology; Dr. David R. Maynard, clinical assistant professor of anesthesia; Dr. Betsy A. Parsley, clinical instructor in pediatrics; Dr. Frank B. Sellers, clinical instructor in orthopaedic surgery; Dr. Lawrence W. Walker, Jr., clinical instructor in obstetrics and gynecology; and Dr. Fred M. Wood, clinical instructor in orthopaedic surgery.

* * *

Dr. Lucile W. Hutaff, who eight years ago became the first woman to hold the rank of full professor at the Bowman Gray School of Medicine, began retirement July 1 after 29 years at the medical school. She has been advanced to Professor Emeritus of Community Medicine and Assistant Professor Emeritus of Medicine.

A hematologist, she was director of the Section on Preventive Medicine from 1964 until 1970 when the department was reorganized as the Department of Community Medicine. She served as acting chairman of the Department of Preventive Medicine and Genetics from 1953 to 1955 and again for three months in 1963.

She has directed the medical school's student health service for the past 21 years.

* * *

Dr. David R. Mace, professor of family sociology, is the author of a new book, "Sexual Difficulties in Marriage," which was released recently by Fortess Press, Philadelphia, Pa. It was his 19th book and his third book to be published this year. He is the author of "Getting Ready for Marriage" and "Abortion: The Agonizing Decision," both published earlier this year by Abingdon Press, Nashville, Tenn.

* * *

Dr. John P. Gudson, Jr., associate professor of obstetrics and gynecology, is the recipient of a \$98,000 grant from The Rockefeller Foundation,

which will enable him to expand his research on immunologic mechanisms in reproduction.

His work deals principally with placental lactogen. It is his hypothesis that by administering the purified lactogen antigen to laboratory animals, they will produce antibodies to placental lactogen which, in turn, will render them sterile. Preliminary results from his recent work indicate that pregnancies not only can be interrupted but may also be permanently prevented by immunologic means.

* * *

Three members of the Department of Surgery recently returned from Strasbourg, France, where they participated in the Second World Congress of the International College of Surgery of the Digestive Tract. Dr. Felda Hightower, professor, was a roundtable panelist for a discussion on "Emergency Surgical Treatment of Hemorrhages of the Upper Digestive Tract in Cirrhotic Patients." Dr. Richard T. Myers, professor and chairman of the department, was a discussant for the topic, "External Biliary Fistulas after Operations on the Biliary Tract." Dr. A. Robert Cordell, professor, spoke on "Clinical Management of Carotid Occlusive Disease and Results of Blood Flow Studies in Carotid Endarterectomy."

* * *

Dr. Norman M. Sulkin, professor and chairman of the Department of Anatomy at the Bowman Gray

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School of Medicine, was featured speaker at the Ninth International Congress of Gerontology. The meeting was held July 1-7 in Kiev, Russia.

He spoke on "The Effects of Aging on the Neuromuscular Apparatus" during a plenary session of the international meeting and served as chairman of a scientific session on "Anoxia and Aging."

His wife, who is a research associate in anatomy, accompanied Dr. Sulkin on the trip and participated in a satellite symposium on "Hypoxia Alterations and Their Consequences in Aged People" in Budapest, Hungary. She presented a paper on "Age Studies on the Effects of Experimental Chronic Hypoxia on Cardiac Muscle: An Electron Microscope Study."

* * *

Dr. David R. Mace, professor of family sociology, presented a paper on "Patients with Marital Problems" June 20 at the annual convention of the American Medical Association in San Francisco, Calif.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

A Duke researcher whose primary areas of concentration are diseases of the cornea and cancer of the eye has been named the second Research to Prevent Blindness, Inc.-Louis B. Mayer Scholar.

The recipient, Dr. Gordon K. Klintworth, an associate professor of pathology and a research associate in ophthalmology, will receive a \$25,000 grant from Research to Prevent Blindness, Inc. (RPB) of New York.

The grant is part of an initial three-year \$75,000 gift to RPB from the Louis B. Mayer Foundation of Beverly Hills, Calif., and is the second of three annual \$25,000 grants.

* * *

A physician who strongly believes in the concept of "treating the total patient" has been named to fill one of two professorships in general pediatrics.

Dr. Samuel L. Katz, chairman of the Department of Pediatrics, was named to the first Wilburt C. Davison Professorship which was created through contributions totaling \$1 million from the Duke Endowment and the Doris Duke Foundation.

Dr. Davison, whose medical specialty was pediatrics, was dean of the Duke School of Medicine from 1927 to 1960, and chairman of its Department of Pediatrics from 1927 to 1954. He died June 26.

* * *

Dr. Jay M. Arena, professor of pediatrics, has been appointed to the National Advisory Committee on Consumer Product Safety of the Food and Drug Administration. His term on the 16-member board will extend to April 30, 1974.

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Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully coordinated with bacteriologic and clinical response. When the patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture media.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in pregnancy has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalyses with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, pericarditis nodosa; and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarities to some pituitary, diuretics and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.



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acute, recurrent or chronic nonobstructed cystitis

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4.

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Gantrisin reaches its sites of action quickly. Measurable levels of the drug have been found in blood and urine within 60 minutes; in 2 to 3 hours, therapeutic levels usually have been reached.

5.

Rapid renal clearance

Gantrisin's rapid excretion rate is another reason why it is generally well tolerated. Over 50% of a single oral dose is excreted in 8 hours, over 90% in 24 to 48 hours, so there is little risk of hematuria or crystalluria, and anuria is rare.

As with all sulfonamides, adequate fluid intake must be maintained. Complete blood counts and urinalyses, with careful microscopic examination, should be performed frequently.

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The committee advises the Commissioner of Food and Drugs on policy matters relating to the safety of consumer products and reviews and recommends on applications for grants-in-aid for research and research training.

* * *

The Department of Obstetrics-Gynecology, Pediatrics and Anesthesiology have joined forces to create a new division of perinatal medicine.

The division will be primarily concerned with problem deliveries. As the interdepartmental approach suggests, it will view the mother and child together as a single patient problem.

Directors of the new division are Dr. George W. Brumley, chief of newborn services, and Dr. M. Carlyle Crenshaw, Jr., E. C., Hamblen Professor of Reproductive Biology and Family Planning.

In September Dr. David Cole will join the division as an obstetrical anesthesiologist. The first faculty member at Duke with this specialty, Dr. Cole will be responsible for anesthetic care of the mother during delivery and for resuscitation of the newborn.

* * *

Dr. Gerald J. Musante, associate professor of psychiatry, attended Dr. Joseph Wolpe's Summer Institute in Behavior Therapy at Temple University Medical School in Philadelphia, Pa. during June.

Dr. Musante is a new member of the executive committee and chairman of the committee on health insurance of the North Carolina Psychological Association.

* * *

Dr. James A. Merchant, fellow in the division of environmental medicine, presented two papers on "Cotton Dust Exposure and Cigarette Smoking" and "Dose Response Studies Among Cotton Textile Workers" at the Skytop Conference on Industrial Disease, held at Skytop, Pa.

Dr. Kaye H. Kilburn, director of the division of environmental medicine, presented a paper on "Biological Effects of Cigarette Smoking in the Pathogenesis of Pulmonary Disease" at the same conference.

* * *

Dr. Daniel C. Tosteson, professor and chairman of physiology and pharmacology, delivered a talk at the U.S.-Japan Seminar on Organization of Energy Transducing Membranes in Tokyo.

Tosteson was also named president-elect of the American Physiological Society.

* * *

Dr. William G. Anlyan was in The Hague, the Netherlands, as a participant in an international conference sponsored by the Josiah Macy, Jr. Foundation on "National Health Services: Their Impact on Medical Education and Their Role in Prevention."

Anlyan, vice president for health affairs, addressed

the conference on "Current Curricular Changes in the Continuum of Medical Education."

Enroute to The Hague, Anlyan stopped in London for discussions on the impact of national health insurance there on medical schools. Following The Hague conference, he traveled to Stockholm, Sweden, for discussions on effects of changes in the health education.

* * *

Dr. William W. Johnston, associate professor of pathology, presented the Ortho Lecture in Cytology at the meeting of the Canadian Society of Cytology in Sherbrooke, Quebec.

The lecture is given annually by a researcher whom the Society recognizes as a valuable contributor in the field of cytology.

* * *

Appointments:

Dr. James N. Davis (M.D. Cornell '65; chief resident in neurology, New York's Cornell-North Shore Hospital), assistant professor of neurology.

Dr. James M. Eaton Jr. (M.D. Emory '61; chief resident in surgery, Emory Medical Center Hospitals), assistant professor of urology.

Dr. Paul G. Killenberg (M.D. University of Pennsylvania; chief resident in medicine, University Hospitals of Cleveland), assistant professor of medicine.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

North Carolina has become the first state to officially launch a statewide program of training and education for autistic children.

At ceremonies here July 10 state and national government leaders joined University of North Carolina officials in launching the unique program.

Dr. Eric Schopler and Dr. Robert J. Reicher, co-directors of the program, said that some 100,000 of North Carolina's two million children suffer some form of minimal brain damage, including autism and related disorders. Autism, they explained, is a condition of "self-absorption to the exclusion of reality."

The new program calls for the establishment of three regional centers — Asheville, Chapel Hill and Greenville — for treatment of the autistic child.

Dr. Bernard Harris will be clinical director of the Asheville unit; Dr. Victor Zinn, Chapel Hill clinical director; and Dr. Malene Irons, clinical director of the Greenville center.

The program was made possible by a \$550,000 appropriation from the 1971 North Carolina General Assembly. Sen. Charles Larkins Jr., D-Lenoir, was chairman of the committee to establish the program.

An important message for doctors under age 55...

The Doctor's Income Plan can pay you up to **\$1,200.00** a month during a disability

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Association Group Department



Some 300 children are expected to be involved in the program by the fall of this year. By mid-year nine classrooms in the three different clinic areas are expected to be in operation, and with the addition of each classroom eight to 20 more children will come into the training and education program.

* * *

Dr. Cecil G. Sheps, UNC vice chancellor for Health Sciences, has been reappointed to the National Academy of Sciences' National Research Council for a three year term beginning July 1.

Dr. Sheps was nominated by and will be representing the American Public Health Association in the Research Council's Division of Medical Sciences. He will serve on the Committee on Problems of Drug Dependence.

* * *

Dr. William D. Heizer of the UNC School of Medicine has been chosen to receive a Career Development Award from the Department of Health, Education and Welfare to conduct laboratory and clinical studies of protein absorption.

Dr. Heizer will be isolating and characterizing intestinal enzymes necessary for the final stages of protein digestion. This information will be used to study several intestinal diseases of unknown cause.

"The project should yield a better understanding of normal digestive processes and may help define

abnormalities underlying certain digestive system disorders," Dr. Heizer explains.

* * *

Research findings from the UNC School of Medicine on the mechanism of the male reproductive function were featured in two papers at the International Congress of Endocrinology held recently in Washington, D. C.

Work on the two papers was conducted in the Division of Pediatrics Endocrinology of the Department of Biochemistry and the Laboratories for Reproductive Biology and in the Clinical Research Laboratory of the Karolinska Institute, Stockholm, Sweden.

Collaborating in this research are Dr. Shihadeh Nayfeh, Dr. Frank S. French, Miss Catherine Dobbins and Donald Tindall of the UNC School of Medicine, and Dr. E. Martin Ritzén, former fellow in pediatric endocrinology at UNC now of the Karolinska Institute.

* * *

Dr. George C. Ham, clinical professor of psychiatry at UNC, has been named a charter fellow of the newly formed American College of Psychoanalysts.

In receiving the honor Dr. Ham was recognized for his "many excellent contributions and achievements in psychiatry and psychoanalysis, for his na-

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tional stature in the field and for the great personal esteem of friends and colleagues."

Dr. Ham joined the UNC School of Medicine faculty in 1951 as the first professor and chairman of the Department of Psychiatry. He stepped down from that position in 1964 to enter private practice as a member of the Psychiatric Associates of Chapel Hill.

* * *

Seventy-four minority and disadvantaged students planning careers in health are in Chapel Hill for the second summer health education program.

Sponsored by the N. C. Health Manpower Program, the course will be ten weeks of intensive scientific study and health orientation work. Programs have been planned in the basic sciences as well as general studies designed to improve verbal and cognitive skills and increase familiarity with scientific terminology and research resources.

Time will also be spent working in specific professional areas and visiting various types of health care facilities.

Last year 37 students were enrolled in the program. Twenty of these were accepted into professional schools with the remaining 17 returning to undergraduate school to finish their training before embarking on health careers.

This summer's enrollment is double that of last year and the number of applications was even greater. Of the 74 black, Indian, Mexican-American and disadvantaged white students enrolled, three-fourths are from North Carolina.

* * *

The School of Medicine's \$6 million Basic Sciences Building will now be called W. Reece Berryhill Hall.

Dr. Berryhill was dean of the medical school from 1941 until 1963. During this time the medical school changed from a two-year to a four-year school permitting it to award the doctor of medicine degree.

After resigning as dean, he was named a Sarah Graham Kenan Professor of Medicine.

* * *

Dr. Louis S. Harris of the UNC School of Medicine was a speaker at the American Chemical Society's annual meeting June 19-22 on the University of Iowa campus.

A professor of pharmacology, Dr. Harris talked about the approach started several years ago to help addicts escape drugs and about his own research at the University in Chapel Hill.

* * *

A male anti-fertility pill is only some three to five years away, an international expert in population control said here recently as he wound up three weeks of research on the UNC campus.

Dr. M. R. N. Prasad is pioneering a radical new approach to control of fertility in the male by using a

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drug that acts on sperm while they are in the male duct system outside the testicles.

A professor of zoology from the University of Delhi, India, Dr. Prasad came to the University here to do his research because it is the only place in the world where he could use a specialized technique on hormone localization.

The technique was developed in the laboratory of University researcher Dr. Walter E. Stumpf.

* * *

George M. Himadi, associate professor in the School of Medicine's Department of Radiology, was on leave from May 1 to August 1 to study ear, nose, throat and chest radiology at Brompton Hospital and the Royal National Throat, Nose and Ear Hospital in London.

* * *

Professor of Medicine Isaac M. Taylor will continue leave to work with the Tri-State Regional Medical Program in Boston, Mass., for a year beginning July 1.

Dr. David K. Wiecking, associate professor of pathology, resigned May 27 to become chief medical examiner of Virginia.

Dr. Orlando F. Gabriele, professor of radiology, resigned June 30 to accept a position at the University of Florida.

Dr. Louis G. Welt, professor of medicine, re-

signed June 30 to accept the chairmanship of the Department of Medicine at Yale University.

Dr. John M. Wells, Jr., assistant professor of medicine, resigned June 30 as appointment at the Wrightsville Marine Biomedical Laboratory was completed.

* * *

Dr. Walter E. Stumpf, associate professor of anatomy and pharmacology has received a \$134,450 three-year National Institutes of Health grant for research on "Hormone Neurons in the Brain: Phylogeny and Ontogeny."

According to Dr. Stumpf's concept, hormone sensitive nerve cells comprise a portion of the vertebrate and mammalian brain which are evolutionarily older than neurons that serve higher animals and man to store memory and to form associations.

This work will help to elucidate the functioning of the brain and the regulation of hormone production and action.

Working with Dr. Stumpf in the UNC Laboratories for Reproductive Biology will be Dr. M. Sar, Dr. L. Grant, and Don Keefer, a graduate student in the UNC Neurobiology Program.

* * *

Calcitonin, a hormone secreted by parafollicular cells of the thyroid gland, has been found to enhance the removal of inorganic phosphate from

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blood, reports Dr. Roy V. Talmage, director of orthopaedic research and professor of surgery at the UNC School of Medicine.

"Previous studies have indicated that calcitonin exerted its physiological effects of depressed blood serum calcium and inorganic phosphate by inhibiting the resorption of skeletal mineral," he said.

"However, recent experiments from our lab clearly demonstrate that a very important action of calcitonin is to enhance the removal of inorganic phosphate from blood. Calcium is also transported out of blood to a much lesser degree."

The use of radioisotopes of calcium and phosphorus were important in elucidating this rapid effect of calcitonin, which has been found in rats with or without thyroids, parathyroids and kidneys.

"Whether a similar response to calcitonin occurs in man has not been determined but it is probable," Dr. Talmage concluded.

Working with Dr. Talmage on this research was Dr. John J. B. Anderson.

* * *

Dr. Joey M. Carter, chief resident of general surgery at N. C. Memorial Hospital, has been awarded the 1972 \$1,000 Nathan A. Womack Scholarship.

The scholarship is awarded to the surgical resident "who best represents those qualities of scholarship so well epitomized by Dr. Nathan A. Womack"—general excellence in teaching, investigation and patient care.

The recipient must be a general overall contributor to the residency program and the surgery department and his personal activities should reflect credit on the department.

* * *

Mrs. Barbara B. Kramer has joined the University of North Carolina Division of Health Affairs staff as program planning assistant to the vice chancellor for Health Sciences.

Vice Chancellor Cecil G. Sheps, in whose office Mrs. Kramer will work, said she will be responsible for working with the various schools and institutes in the Division in the area of program planning and coordination of ongoing and future activities. She will also serve as coordinator of the University Self-Study for the Division of Health Affairs.

* * *

A \$420,000 training grant has been awarded to the Family Medicine Program at Moses H. Cone Memorial Hospital in Greensboro by the U. S. Department of Health, Education and Welfare.

The Greensboro-based program is a joint responsibility of the UNC School of Medicine and the Cone Hospital.

* * *

The University of North Carolina here was host to a small, distinguished international gathering of representatives of the U.S.-Japan Committee on Scientific Cooperation at the Co-Chairmen's meeting here June 29 and 30.

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The full committee meets every other year, with a meeting in alternate years of the two co-chairmen, together with one or two additional committee members and government staff people from the Japanese Foreign Office and Ministry of Education, the U. S. State Department, the National Science Foundation, and the Japan Society for the Promotion of Science.

Dr. H. Stanley Bennett, Sarah Graham Kenan Professor of Biological and Medical Sciences of the University of North Carolina, is the American co-chairman, and Dr. Masao Yoshiki, Professor Emeritus of Tokyo University School of Engineering is the Japanese co-chairman.

The U. S. - Japan Committee on Scientific Cooperation was established in 1961 in accordance with an agreement made by President Kennedy and Prime Minister Ikeda to establish cooperative and exchange agreements between the two countries in the fields of science, natural resources, and culture and education.

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

During the month of July, the North Carolina Regional Medical Program added three members to its program staff. They are: Miss Margaret Anita Page, health professions specialist; James K. Dias, biometrician; and James H. Millner, health planner.

Miss Margaret Anita Page, a Durham native, graduated magna cum laude from North Carolina Central University in 1970 with a B.S. degree in Health Education. She is presently working on her M.P.H. in health education and expects to receive her degree this summer. In 1969 she worked with the Camden, N. J. Health Department, through a health education intern training program sponsored by the State of New Jersey Health Department.

James K. Dias, a native of Florence, S. C., is a graduate of the College of Charleston, receiving his B.S. degree in biology in the spring of 1969. He expects to complete his M.S. degree in the Department of Biometry at the Medical University of South Carolina in the next few months. He has previously been employed by the John C. Calhoun Academy in Walterboro, S. C., as a teacher and head of the science department.

James H. Millner, a native of Martinsville, Virginia, attended Winston-Salem State College, graduating in 1966 with a B.S. in education. He is currently working toward his M.A. degree in urban and regional planning. Prior to joining the NCRMP staff, he was employed by the Cooperative Area Manpower Planning System in Richmond, Virginia, where he coordinated plans for manpower training pro-

grams throughout the state. He has also worked as a contract service representative for the National Alliance of Businessmen.

Charles G. Oakes, Ph.D., whose appointment was previously announced in this column, has assumed his responsibilities as director of the Planning and Evaluation Division. Prior to his appointment with NCRMP, Dr. Oakes was associate professor and chairman of the Sociology Department at Converse College in Spartanburg, S. C. He has also served as assistant professor and chairman of the Sociology Department of Southwestern-at-Memphis in Tennessee.

* * *

The Regional Advisory Group of the North Carolina Regional Medical Program has adopted a new committee structure to facilitate involvement of its members at all stages of the decision-making process. Under the new structure there are six committees. In addition to the planning and evaluation committees, there are four program committees: Health Manpower, Emergency Medical Services, Quality of Personal Health Care Services, and Personal Health Care Delivery Systems.

The program committees, established as a result of the four priority areas identified by the Planning Committee, have determined the goals and objectives listed here in their respective areas of emphasis. It should be noted that the statement on Emergency Medical Services is tentative, as the EMS Committee has not yet had an opportunity to meet. It should also be noted that there will be amplification of these goals and objectives, and copies of the final statements will be sent to the MSSNC, local medical societies, community colleges and technical institutes, and community hospitals.

Health Manpower

Promote and assist the development, efficient utilization and optimum distribution of qualified health care personnel throughout the state, with special attention to underserved areas, both rural and urban:

Support, with and through the state and area-wide CHP agencies, systematic health manpower needs assessments, based on previously determined standards of care, so that priorities may be established in the areas of manpower development, utilization and distribution.

Enhance and support area-wide cooperative efforts of education institution (e.g., technical institutes, community colleges, universities) and health care providers as they seek to design and implement education and training opportunities for health care personnel.

Encourage and support the utilization of newly developed categories of manpower in organized systems of health care delivery.

Promote distribution of health manpower in ac-

cordance with identified needs.

Promote and support the use of more effective educational methods and techniques in retraining or improving existing health care personnel.

Encourage and support an interdisciplinary team approach to the training and utilization of health care personnel.

Emergency Medical Services

Promote and assist the development and implementation of appropriate, available, and accessible Emergency Medical Services:

Promote and encourage the concept of Emergency Medical Services as an integrated system.

Stimulate and support local, regional, and statewide groups to plan for Emergency Medical Services.

Implement demonstrations of regional or sub-regional comprehensive Emergency Medical Service Systems.

Quality of Personal Health Care Services

Promote and assist the development and implementation of mechanisms to improve the quality and standards of personal health care services:

Promote and encourage concepts which will improve quality of personal health care services.

Assist health care professions to develop standards of performance, within their own group and other collaborating groups, as related to clinical services (e.g., Ob-Gyn, Pediatrics) and disease categories.

Assist professional societies and associations to implement quality assessment mechanisms such as peer review, interdisciplinary team review, self evaluation, clinical unit, utilization review, and similar activities.

Personal Health Care Delivery Systems

Promote and assist providers and consumers to develop techniques and innovative delivery patterns for improving the accessibility, efficiency, and effectiveness of personal health care for areas of need throughout the state:

Stimulate and support activities which will promote investigation and implementation of innovative patterns in organizing health care delivery systems.

Provide special consultation and feasibility study assistance to local medical societies, interested groups of physicians, and other health providers and consumers to plan for the organization, financing, and implementation of new kinds of health care delivery systems.

NORTH CAROLINA HEART ASSOCIATION

The North Carolina Heart Association has set a deadline of Oct. 1, 1972 for receiving applications

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for research grants-in-aid up to \$2,500, except in unusual circumstances when they will consider applications for larger amounts from investigators within the state working in the cardiovascular field. These grants-in-aid are awarded by the Heart Association and its chapters to scientists to serve as pilot projects and as a method of encouraging postdoctoral scientists toward a research career. Preference in funding will be given to junior investigators.

The grants-in-aid are one phase of the Heart Association's research program which is supported by public contributions to the annual Heart Fund campaign.

Applications for these grants may be forwarded to Richard W. St. Clair, Ph.D., Chairman, Research Review Subcommittee, North Carolina Heart Association, P. O. Box 2408, Chapel Hill, N. C. 27514.

This research program is separate from that of the American Heart Association, which annually makes numerous research grants to scientists in North Carolina. Those interested in inquiring about the national program are asked to write to the American Heart Association, 44 East 23rd Street, New York, New York 10010.

NORTH CAROLINA DEPARTMENT OF MENTAL HEALTH

Dr. Eugene A. Hargroves, state commissioner of mental health, has announced the resignation of Dr.

William M. Fowlkes as regional commissioner of the western region. Fowlkes resigned August 1 from the Raleigh office staff of the Department of Mental Health to assume the directorship of the Lee-Harnett Unit at Dorothea Dix Hospital in Raleigh.

Dr. Iverson Riddle, superintendent of Western Carolina Center at Morganton, will serve as acting regional commissioner.

AMERICAN COLLEGE OF RADIOLOGY

Dr. Ira E. Bell, Jr., of Hickory was honored recently by being elected a fellow of the American College of Radiology.

Dr. Bell, who is affiliated with Richard Baker Hospital and Catawba Memorial Hospital, was cited at a convocation during the college's forty-ninth annual meeting in Miami Beach.

LEUKEMIA SOCIETY OF AMERICA, INC.

Investigators interested in pursuing careers in the field of leukemia research may apply now to the Leukemia Society of America, Inc. for financial grants to support their future work.

According to Dr. Joseph H. Burchenal, the voluntary health agency's vice president for medical and scientific affairs, applications for funding must be submitted by Nov. 1, 1972. Approved grants will become effective as of July 1, 1973.

The Society offers three types of funding to individual investigators. They are: Scholarships: for five year periods totalling \$100,000; Special fellowships and fellowships for two years in each category for grants of \$31,000 and \$19,000 respectively. Funding is not limited to United States citizens and is available to qualified individuals working in other countries.

Application forms may be obtained by writing to the Vice President for Medical and Scientific Affairs, Leukemia Society of America, Inc., 211 East 43rd Street, New York, N. Y. 10017.

AMERICAN ASSOCIATION FOR AUTOMOTIVE MEDICINE

The American Association for Automotive Medicine announces its sixteenth annual meeting to be held in Chapel Hill, Oct. 18-21, 1972, at the Carolina Inn.

The Association includes among its activities the support of research and development programs leading to better bio-engineering of motor vehicles, and the dissemination of new knowledge in the field of traffic and vehicular safety. Many of the papers presented at past meetings have had real clinical application and relevance.

North Carolina physicians are invited and encouraged to attend all or part of the meeting. The tentative program for 1972 will soon be available.

Physicians and others interested in membership in the Association may write to Page Hudson, M.D. 612 Laurel Hill Road, Chapel Hill, N. C. 27514.

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B.I.D./T.I.D. dosage for around-the-clock coverage

Subsequent 1-Gm doses provide up to 12 hours of antibacterial coverage. More severe u.t.i. may require a q. 8 h. dosage regimen. Either schedule provides coverage during the waking

and sleeping hours—especially important during hours of sleep when normal urinary retention tends to favor bacterial proliferation.

Also effective in nonobstructed chronic and recurrent u.t.i.

It is not uncommon for the elderly and the debilitated to develop chronic and/or recurrent nonobstructed urinary tract infections such as pyelonephritis and cystitis. Such cases often re-

spond satisfactorily to Gantanol. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent u.t.i.

Your Option: Tablets or Suspension

Either dosage form—the Tablets or the pleasant-tasting, cherry-flavored Suspension—can provide the dependable antibacterial activity necessary to control susceptible nonobstructed cystitis and pyelonephritis. Symptomatic improvement may usually be expected in 24 to 48 hours. The usual precautions with sulfonamide

therapy should be observed, including adequate fluid intake. Gantanol (sulfamethoxazole) is generally well tolerated with relative freedom from complications; the most common side effects are nausea, vomiting and diarrhea. Frequent c.b.c.'s and urinalyses with microscopic examination are recommended.

In nonobstructed cystitis and pyelonephritis due to susceptible organisms

Gantanol® (sulfamethoxazole) Basic Therapy

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, poprothrombinemia and methemoglobinemia; *allergic reactions:* exanthema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myositis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, enteritis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to

certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm (2 tabs or teasp.) b.i.d. or t.i.d. depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs (½ tab or teasp.) b.i.d. Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.



Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Month in Washington

The 1972 Democratic campaign platform calls for establishment of a federally administered, comprehensive national health insurance system to cover all Americans and to incorporate eventually all federal health programs.

The health care plank was hammered out by Democratic policy makers in Washington prior to the presidential nominating convention in Miami Beach. Several positions, including the stand on Health Maintenance Organizations, in the health care plank were similar to those of the American Medical Association.

Health care parts of the platform proposed by the majority of the drafting committee include:

HEALTH CARE

Good health is the least this society should promise its citizens. The state of health services in this country indicates the failure of government to respond to this fundamental need. Costs skyrocket while the availability of services for all but the rich steadily decline.

We endorse the principle that good health is a right of all Americans.

America has a responsibility to offer to every American family the best in health care wherever they need it, regardless of income or where they live or any other factor.

To achieve this goal the next Democratic Administration should:

—Establish a system of universal national health insurance which covers all Americans with a comprehensive set of benefits including preventive medicine, mental and emotional disorders, and complete protection against catastrophic costs, and in which the rule of free choice for both provider and consumer is protected. The program should be federally financed and federally administered. Every American must know he can afford the cost of health care whether given in a hospital or a doctor's office;

—Incorporate in the national health insurance system incentives and controls to curb inflation in health care costs and to assure efficient delivery of all services;

—Continue and evaluate Health Maintenance Organizations;

—Set up incentives to bring health service personnel back to inner-cities and rural areas;

—Continue to expand community health centers and availability of early screening diagnosis and treatment;

—Provide federal funds to train added health manpower including doctors, nurses, technicians and paramedical workers;

—Secure greater consumer participation and control over health care institutions;

—Expand federal support for medical research including research in heart disease, hypertension, stroke, cancer, sickle cell anemia, and occupational and childhood diseases, which threaten millions and in preventive health care;

—Eventual replacement of all federal programs of health care by a comprehensive National Health Insurance System;

—Take legal and other action to curb soaring prices for vital drugs using anti-trust laws as applicable and amending patent laws to end price-raising abuses, and require generic-name labeling of equal-effective drugs; and

—Expand federal research and support for drug abuse treatment and education, especially development of non-addictive treatment methods.

On birth control, the platform states:

—Family planning services, including the education, comprehensive medical and social services necessary to permit individuals freely to determine and achieve the number and spacing of their children, should be available to all, regardless of sex, age, marital status, economic group or ethnic origin, and should be administered in a non-coercive and non-discriminatory manner.

On rights of veterans:

—*Medical Care:* The federal government must guarantee quality medical care to ex-servicemen, and to all disabled veterans, expanding and improving Veterans Administration facilities and manpower and preserving the independence and integrity of the VA hospital program. Staff-patient ratios in these hospitals should be made comparable to ratios in community hospitals. Meanwhile, there should be an increase in the VA's ability to deliver outpatient care and home health services, wherever possible treating veterans as part of a family unit.

We support future integration of health care for veterans into the national health care insurance program, with no reduction in scale or quality of exist-

ing veterans care and with recognition of the special health needs of veterans.

The VA separate personnel system should be expanded to take in all types of health personnel, and especially physician's assistants; and VA hospitals should be used to develop state medical schools and area health education centers.

The VA should also assume responsibility for the care of wives and children of veterans who are either permanently disabled or who have died from service-connected causes. Distinction should no longer be made between veterans who have seen "wartime," as opposed to "peacetime," service.

For the elderly:

—Establish federal standards and inspection of nursing homes and full federal support for qualified nursing homes;

—Pending a full national health security system, expand Medicare by supplementing trust funds with general revenues in order to provide a complete range of care and services; eliminate the Nixon Administration cutbacks in Medicare and Medicaid; eliminate the part B premium under Medicare and include under Medicare and Medicaid the costs of eyeglasses, dentures, hearing aids, and all prescription drugs and establish uniform national standards for Medicaid to bring to an end the present situa-

tion which makes it worse to be poor in one state than in another.

Before the platform was drafted, two of the Democrats' big guns on health care in Congress appeared jointly for the first time at a platform subcommittee pre-drafting hearing in St. Louis. They were Rep. Wilbur D. Mills of Arkansas and Sen. Edward M. Kennedy of Massachusetts. They showed themselves together in support of a broad national health insurance but still were not in agreement over how it should be financed and administered.

The platform committee accepted Kennedy's views on these two points, but Mills' ideas probably will carry more weight when Congress gets around to taking up such legislation.

"The federal government should establish a system of compulsory national health insurance which covers all Americans with a standard, comprehensive set of basic health insurance benefits supplemented by protection against catastrophic costs," said the Mills-Kennedy statement which included four "freedom guarantees":

—The federal government should not own and operate the various elements of the health care system.

—The federal government should not remove the freedom of every physician and every patient to



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choose where and how they will give or receive health care.

—Neither the federal government, nor any of its agents, shall make any medical judgments in a patient's care; this function is reserved solely to the physician and his peers.

—The federal government shall not make community health policy but shall offer financial and technical support and information and guidelines based on national planning to support local policy formulation.

* * *

Dr. John R. Kernodle, then vice chairman (now chairman) of the AMA Board of Trustees, urged that any national health insurance program supported by the Democratic party be feasible as to benefits, financially responsible, and be built on the present proven system of health care delivery.

"In considering any proposal for national health insurance, it is important that several factors receive a careful evaluation," Dr. Kernodle said. "First, the program must be feasible in terms of services offered and promises made. It should not hold out promise of benefits which cannot be fulfilled. We urge that any program should be financially responsible, so that public funds are utilized principally to provide financial assistance to those individuals who cannot finance their own medical care through their personal resources. The adoption of any na-

tional health insurance plan which undertakes the total medical care of everyone, regardless of their financial circumstances, and does this at public expense, is unwarranted. We would further urge that any plan which is adopted by your Committee also incorporate the use of those private institutions and those private resources and those proven methods of health care delivery which have provided to the people of the United States high quality medical care. Any plan should build on those strengths of the present system and be the means by which a new era of good health and productivity is ushered in for the American people. . . .

"The physicians of America have always maintained that high quality medical care should be available for all Americans, including those who need financial assistance in meeting the cost of such care. We believe that the public health care dollar is used most effectively when it is applied principally for the benefit of those individuals and families whose financial circumstances preclude them from acquiring health insurance protection from their own funds. We believe strongly that to a maximum degree possible any national health insurance program should utilize those mechanisms which have proved themselves to be beneficial in the provision of care to private patients. At the same time we favor experimentation, innovation, and the trial of multiple alternative methods for health care delivery to pro-

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When we say, "We believe there's more to good health than just paying bills," we mean it. So, in the interest of your good health, we've been recommending reading. Not a whole lot of reading. Just a little, for your own health's sake.

We've been sending you health education booklets on such subjects as Drugs, Alcoholism, First Aid, Middle Age, Adolescence, Prenatal Care, and many more ... over 100,000 booklets last year alone. We've been trying to help you recognize serious diseases, so you can get help early. We've been talking about illness and the things you can do to prevent it, before it begins. We've been trying to help you safeguard your health.

This year we'll be stepping up our health education program. Because it's been estimated that if we all took a little more care — if we all knew more about our own health — we could eliminate up to one half of all hospital stays. And, as we say, "We believe there's more to good health than just paying bills."

So we'll continue to publish those important little health books. We'll keep on urging you to take better care of your health. Because it's our business to be concerned about your health. That's what we're here for.

(If you haven't been getting our health booklets but would like to, write to our Public Relations office, P. O. Box 2291, Durham, 27702. Single copies are free.)

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mote the evolutionary development of productive and viable systems of health care appropriate to the needs of a variety of communities.

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porated in a proposal which was written by the medical profession known as Mediredit and which has been sponsored by 172 members of the present 92nd Congress. This program, using tax credits, enables all individuals to acquire the type of health care services they prefer. It provides a uniform level of benefits — comprehensive in scope."

Book Reviews

Manual of Analytical Toxicology. Edited by I. Sunshine. 393 pages. Price, \$15.00. Cleveland, Ohio: Chemical Rubber Company Press, 1971.

This book is designed to answer the question, Which of the many methods available to the clinical chemist should he use in the analysis of toxic substance? For many of the more than 70 substances listed, three types of methods are given. Type A methods are simple, direct, qualitative tests. Type B methods are designed for quantitative analysis utilizing facilities generally found in the average laboratory. Type C methods are elegant, more precise ones, using whatever equipment may be required.

The detailed procedures described in the main section of the book represent the efforts of nearly 40 practicing toxicologists. There are lists of apparatus and reagents and, more important, information on interpretation, accuracy and precision, and interfering substances. An adequate bibliography accompanies each method. Another section of the book is devoted to screening procedures for use in situations where identity of the offending drug is not known.

In addition to the detailed descriptions of analytical procedures, the editor has presented information that will be helpful to the analyst, the clinician, and the pathologist in using various analytical services to the best advantage, considering the problems involved in handling materials in microscale quantities.

This book is typical of the many excellent ones already edited by Dr. Sunshine. It is well organized; the procedures are detailed and straightforward. It should be useful to toxicologists, clinical and forensic chemists and pathologists, and to the occasional analyst needing a method for one of the specific compounds considered.

Dr. Sunshine has done an excellent job in bringing together a vast wealth of analytical information. The book should be conveniently within reach of

anyone involved in the analysis of toxic substances in biologic material.

NORMAN H. LEAKE, Ph.D.

The Use of Lithium in Psychiatry. By Barry Maletzky and Paul H. Blachly. Price, \$10.50. Cleveland: Chemical Rubber Company Press, 1971.

This is a special treatise on a subject needing condensation and clarification. The monograph is organized in a very logical way, presenting an interesting historical perspective with interpretive conjecture about why such a useful and inexpensive drug had failed to receive FDA approval for general use as a psychotropic agent in this country for nearly two decades. The concern about toxicity seems exaggerated in view of the rather hasty FDA approval of several other psychotropic agents of far greater toxicity which were developed at great expense by the pharmaceutical industry during the same period. It is suggested in the monograph that profit-making potential is an essential requirement for promotion of a new drug and ready approval by the FDA. Anyhow, lithium is not a new drug, and its therapeutic effectiveness in the manic phase of manic-depressive psychosis has been well documented by researchers in Australia and Europe over the past twenty years.

The authors present an excellent and adequately critical review of the literature on the use of lithium in psychiatry, with an extensive bibliography, and some very appropriate comments regarding unresolved aspects of the drug's action, long term effects and future therapeutic potentials. Certainly, the experience of past researchers and the recent experiences of American psychiatrists would lead one to expect lithium to find its place in our psychotropic pharmacopoeia as an effective agent in treating "manic illness," a disorder which has caused a disproportionate amount of management difficulty in psychiatric hospitals and to practicing physicians.

WILLIAM S. PEARSON, M.D.

In Memoriam

Matthew S. Broun, M.D.

Dr. Matthew Singleton Broun, a dear friend to many and a cherished colleague of the medical profession, departed his earthly existence January 10, 1972.

Dr. Matt, as he was known to us, was born in Asheville, April 25, 1892. He received his early education in North and South Carolina and was graduated from the University of South Carolina with a degree in engineering in 1913. He obtained a job in the engineering field, but decided later to enter medicine. In 1915 he began his medical education at the College of Physicians and Surgeons of Columbia University in New York. After graduation he served a three-year residency at St. Luke's Hospital in New York, and on completion of this training he returned to Asheville to begin his medical practice, specializing in diseases of the eyes, ears, nose and throat. He remained in Asheville from 1921 to 1936.

Since 1936 Dr. Matt had lived in Roanoke Rapids,

North Carolina. He was not only interested in medicine, but took an active part in the community life and was also an active member of the Episcopal Church, which he loved and cherished. He was a long-time active member of the Kiwanis Club. He was a member of the Fifty Year Club of the North Carolina Medical Society, and took an active part in local, state, and national medical affairs.

Dr. Matt was a quiet and humble man who obtained his goals unassumingly by alleviating the ills of mankind to the best of his ability. He was kind and helpful to everyone up to his final illness, and he will be missed by the medical profession, the church, and the Roanoke Rapids community, as well as by his family.

Dr. Broun is survived by his wife, the former Miss Fanny Underhill, their two daughters, and five grandchildren. Our heartfelt sympathy and condolences are extended to the family.

HALIFAX COUNTY MEDICAL SOCIETY

The common causes of abortion are, the death of the child; weakness or relaxation of the mother; great evacuations; violent exercise; raising great weights; reaching too high; jumping or stepping from an eminence; vomiting; coughing; convulsion-fits; strokes on the belly; falls; fevers; disagreeable smells; excess of blood; indolence; high living; or the contrary; violent passions or affections of the mind, as fear, grief, etc.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 361.*

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES: NORTH CAROLINA,
MAY 1972 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		TOTAL DELIVERIES June 1971 - May 1972	PERINATAL RATE PER 1,000 DELIVERIES	Perinatal Deaths		TOTAL DELIVERIES June 1971 - May 1972	PERINATAL RATE PER 1,000 DELIVERIES	Perinatal Deaths			TOTAL DELIVERIES June 1971 - May 1972	PERINATAL RATE PER 1,000 DELIVERIES	Perinatal Deaths		TOTAL DELIVERIES June 1971 - May 1972	PERINATAL RATE PER 1,000 DELIVERIES				
	May 1972	June 1971 - May 1972			May 1972	June 1971 - May 1972			May 1972	June 1971 - May 1972				May 1972	June 1971 - May 1972						
NORTH CAROLINA	135	1768	66021	26.8	86	1208	28668	42.1													
ALAMANCE	2	31	1212	25.6		21	417	50.4	PENDER		3	172	-	1	3	154	-				
ALEXANDER	1	14	344	40.7		1	38	-	PERQUIMANS		1	58	-			50	-				
ALLEGHANY		4	128	-			5	-	PERSON		7	283	24.7		4	208	-				
ANSON		6	190	31.6		13	268	48.5	PITT		22	637	34.5	1	23	639	36.0				
ASHE		12	292	41.1			3	-	ROCK		3	143	-			25	-				
AVERY	2	11	225	48.9			1	-	RANDOLPH		1	38	1193	31.9		5	118	42.4			
BEAUFORT	1	9	393	22.9		8	253	31.6	RICHMOND		2	15	450	33.3		11	258	42.6			
BERTIE		4	104	-		7	232	30.2	ROBESON		2	14	622	22.5	5	64	1709	37.4			
BLADEN	2	5	256	19.5	2	8	226	35.4	ROCKINGHAM		3	31	1015	30.5	1	27	403	67.0			
BRUNSWICK		3	361	-	1	11	163	67.5	ROWAN		3	21	1130	18.6	2	11	319	34.5			
BUNCOMBE	5	64	1918	33.4	2	16	254	63.0	RUTHERFORD		1	18	679	26.5		6	172	34.9			
BURKE	1	22	1020	21.6		8	92	-	SAMPSON		8	408	19.6	1	13	327	39.8				
CABARRUS	2	24	955	25.1	3	12	309	38.8	SCOTLAND		1	14	317	44.2		14	311	45.0			
CALDWELL	3	28	1031	27.2		2	81	-	STANLY		4	18	604	29.8	1	7	120	58.3			
CAMDEN		2	56	-			46	-	STOKES		2	10	407	24.6		2	62	-			
CARTERET	1	9	531	16.9		1	80	-	SURRY		1	26	879	29.6	1	3	55	-			
CASWELL	1	10	161	62.1		8	177	45.2	SWAIN		2	113	-		1	68	-				
CATAWBA	5	54	1495	36.1		8	248	32.3	TRANSLYVANIA		12	275	43.6		1	21	-				
CHATHAM	2	11	316	34.8		3	151	-	TYRRELL			16	-		3	33	-				
CHEROKEE		4	265	-			13	-	UNION		2	20	775	25.8	23	331	69.5				
CHOWAN		3	87	-		3	99	-	VANCE		1	10	352	28.4	2	18	344	52.3			
CLAY		1	109	-			1	-	WAKE		3	67	2828	23.7	1	41	1122	36.5			
CLEVELAND	3	40	974	41.1	2	17	404	42.1	WARREN			75	-		10	184	54.3				
COLUMBUS	1	24	529	45.4	2	16	368	43.5	WASHINGTON		1	122	-		14	126	117.1				
CRAVEN	3	30	1198	25.0	1	16	411	38.9	WATAUGA		1	10	340	29.4		1	6	-			
CUMBERLAND	7	86	3903	22.0	8	60	1659	36.2	WAYNE		2	38	1161	32.7	1	27	614	44.0			
CURRITUCK		2	79	-			43	-	WILKES			31	858	36.1	3	56	-				
DARE		2	97	-			7	-	WILSON		1	9	511	17.6	1	20	534	37.5			
DAVISON	3	50	1519	32.9		13	251	51.8	YADKIN			11	376	29.3		1	26	-			
DAVIE		9	278	32.4		3	57	-	YANCEY			4	202	-			3	-			
DUPLIN	1	9	381	23.6	2	16	305	52.5	City totals are also included in county totals												
DURHAM	2	38	1278	29.7	4	37	905	40.9	ALBEMARLE		1	138	-	1	2	41	-				
EDGEcombe		7	393	17.8	3	22	509	43.2	ASHEBORO		2	209	-			26	-				
FRANKLIN	5	49	2498	19.6	5	38	1161	32.7	ASHEVILLE		19	599	31.7	2	15	227	66.1				
		4	187	-		14	239	58.6	BURLINGTON		15	464	32.3		5	144	34.7				
GASTON	3	54	2605	20.7	1	22	495	44.4	CHAPEL HILL		6	255	23.5		1	59	-				
GATES		2	58	-	1	7	91	-	CHARLOTTE		1	55	2616	21.0	11	86	2016	42.7			
GRAHAM		2	101	-			6	-	CONCORD			8	178	44.9	2	5	115	43.5			
GRANVILLE		12	222	54.1		16	313	51.1	DURHAM		1	20	752	26.6	4	30	785	38.2			
GREENE	1	6	80	-		6	122	49.2	EDEN		1	8	191	41.9		4	59	-			
GUILFORD	9	85	3353	25.4	5	70	1588	44.1	ELIZABETH CITY			4	122	-		3	89	-			
HALIFAX		16	389	41.1	1	23	612	37.6	FAYETTEVILLE		1	26	1026	25.3	3	36	633	56.9			
HARNETT	2	13	651	20.0	1	20	299	66.9	GASTONIA		1	20	716	27.9		9	250	36.0			
HAYWOOD		15	638	33.5			13	-	GOLOSBOBO		2	8	280	28.6		13	253	51.4			
HENDERSON	6	25	702	35.8		1	37	-	GREENSBORO		4	39	1621	24.1	2	44	1004	43.8			
									GREENVILLE			8	249	32.1		5	186	26.9			
HERTFORD		2	134	-	2	15	259	57.9	HENDERSON			5	169	29.6		5	144	34.7			
Hoke		2	122	-		12	244	49.2	HICKORY			14	298	47.0		5	121	41.3			
HYDE		3	40	-		3	57	-	HIGH POINT		4	22	734	30.0	1	19	423	44.9			
IREDELL	1	20	911	22.0	4	16	344	46.5	JACKSONVILLE			15	366	41.0		2	76	-			
JACKSON		8	280	28.6		2	62	-	KINSTON		1	10	241	41.5		11	225	48.9			
JOHNSTON	3	25	785	31.8	1	14	293	47.8	LENOIR		2	6	198	30.3			41	-			
JONES			82	-		1	84	-	LEXINGTON			12	245	49.0		4	91	-			
LEE	1	10	409	24.5	1	15	183	82.0	LUMBERTON			3	202	-	1	9	209	43.1			
LENOIR	2	19	538	35.3		20	438	45.7	MONROE		1	2	125	-		9	105	85.7			
LINCOLN		15	533	28.1		4	115	-	MORGANTON			6	122	49.2		3	26	-			
MCOWELL	1	13	533	24.4		1	40	-	NEW BERN			2	161	-		5	156	32.1			
MACON		4	236	-			9	-	RALEIGH			31	1277	24.3		32	601	53.2			
MADISON	1	14	248	56.5			2	-	REIDSVILLE			6	148	40.5		7	99	-			
MARTIN		1	5	200		15	272	55.1	ROANOKE RAPIDS			7	189	37.0		3	42	-			
MECKLENBURG	6	89	4321	20.6	11	95	2337	40.7	ROCKY MOUNT E			1	93	-		7	134	52.6			
MITCHELL		2	188	-			1	-	ROCKY MOUNT N			5	208	19.9		6	113	-			
MONTGOMERY		5	238	21.0		3	116	-	SALISBURY		1	4	168	-	1	6	140	42.9			
MOORE		15	462	32.5		15	234	64.1	SANFORD		1	4	138	-		5	83	-			
NASH		12	564	21.3		12	501	34.0	SHELBY			8	155	51.6	1	3	107	-			
NEW HANOVER	5	30	1194	25.1	1	14	451	31.0	STATESVILLE		1	5	197	25.4		6	167	35.9			
NORTHAMPTON		3	112	-		17	303	56.1	THOMASVILLE			7	208	33.7		7	94	-			
ONslow	7	67	2237	30.0		6	415	14.5	WILMINGTON		1	14	521	26.9	1	12	396	30.3			
ORANGE	2	20	734	27.2	3	16	224	71.4	WILSON			2	252	-		8	243	32.9			
PAMLICO		1	88	-		3	61	-	WINSTON SALEM		4	24	1157	20.7	5	33	1000	33.0			
PASQUOTANK		7	269	26.0		5	173	28.9													

Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

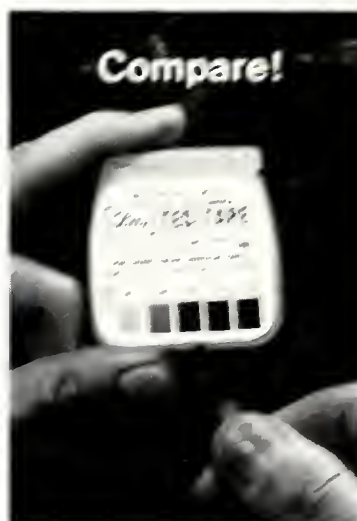
Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

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NORTH CAROLINA

Medical Journal

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PRESIDENT'S NEWSLETTER

NORTH CAROLINA MEDICAL SOCIETY

No. 4

September 1, 1972

The Subcommittee on Needs for Education of Medical Students in North Carolina of the North Carolina Joint Conference Committee on Medical Care, which has been engaged in a year-long study of the needs for education of medical students, will present its report to the entire Joint Conference Committee on September 7 and to the Council of the North Carolina Medical Society on October 1. The committee has been engaged in this study as a result of the resolution from Lincoln County passed by the Medical Society House of Delegates in May 1971. A preliminary report of the subcommittee was made to the University of North Carolina Board of Governors Committee considering a budget request for a possible second year in the medical school at East Carolina University. The report, as noted in many North Carolina newspapers, though not yet officially adopted by the Medical Society, does not favor the establishment of a four year medical school at East Carolina at this time, and following the action of the Executive Council on October 1, will be available to the membership of the North Carolina Medical Society as specified in the original Lincoln County resolution.

The National Health Service Corps, created by passage of the Emergency Health Personnel Act of 1970, is beginning to function in North Carolina to bring physician personnel to some areas of the state which have clinical health manpower shortages. The Corps has assigned health care teams to some of these areas already; others are awaiting action on their application. The National Health Service Corps, in a communication of August 11, 1972, noted "that there are 28 physician vacancies in the Southeast. In addition to providing a humanitarian service, health professionals may be interested in the following benefits:

- Salaries - From \$15,000 - \$20,000, depending upon qualifications.
- Established medical practice - Public Health Service assistance to become situated, including facilities and equipment. Choice of remaining in the location when government service expires.
- Fulfillment of military obligation - Young doctors can fulfill their two-year military obligation in this service; or they may enter the regular Civil Service system.
- Choice of assignments - Positions open in six states in the South.
- Further opportunities - Training and professional relationships may be obtained and continued, plus salary advances and benefits.

Any physician, nurse, or dentist interested in learning more about joining the National Health Service Corps may get in touch with: Mr. Donald Scheer, Director, National Health Service Corps, DHEW, 50 Seventh Street, N.E., Atlanta, Georgia 30323. Telephone: (404) 526-5007."

The Case for American Medicine, a book written by Harry Schwartz of the New York Times, will be published in October. An announcement by the publisher, David McKay, N.Y., describes the book as "a realistic look at our health care system and the utopian alternatives." The announcement points out that "Americans have been receiving more--and usually better--medical care than ever before in the nation's history. Yet critics of the present system feel that the nation is

in the midst of a 'health care crisis.'" The author "agrees that there is room for improvement in the system, but that the road to medical utopia is not one violent transformation of our entire medical system," the announcement said.

A Recent Opinion Poll by the Republican Platform Committee lists 31 subjects of national interest and asks that they be graded by degree of importance. The response ranked as very important crime reduction by 75% of those answering, inflation and drug abuse by 74%, welfare reform by 72%, curbs on federal spending by 68%, rein on union power by 64%, and increased health care by only 20%; 34% said that increased health care was somewhat important, and 37% rated it not very important and not a problem. The other 9% had no opinion.

The National Health Insurance Question will be the intercollegiate debate topic for the 1972-1973 academic year. College and university forensic departments indicated a clear-cut preference for that subject in a nationwide poll. "Resolved: That the federal government should provide a program of comprehensive medical care for all U.S. citizens," is the debate proposition. A proposition calling for withdrawal of all military ground forces to installations within the U.S. and its possessions was second in the balloting. Voting was limited to four propositions.

As a special service for collegiate debaters the AMA is developing a kit that will provide basic information on current national health insurance proposals. Among the materials to be included are the AMA pamphlet, Medical and Health Care for All, and a bibliography of source material. Medical societies should anticipate requests for these kits. Send student requests or medical society requests for bulk orders to Speakers and Leadership Programs, AMA Headquarters. Kits will be available in August.

North Carolina Is One of Nine Target States which will be invited to send representatives to Chicago where the National Joint Practice Commission will sponsor a one and a half day conference on November 9 and 10 for physician and nurse representatives of the existing and developing counterpart organizations at the state level. Created last January to foster changes in medical and nursing practice that can lead to improved patient care, the NJPC is comprised of eight physicians appointed by AMA's Board of Trustees and eight RNs appointed by the American Nurses' Assn. It will hold its third meeting in Chicago this month. Now in the mail to all state medical associations and state nursing associations is a letter asking them to send representatives to the invitational fall conference. The conference will explore issues and problems of common interest and report progress in improving liaison between the medical and nursing professions.

Congratulations Are in Order for John A. McMahon, President of North Carolina Blue Cross-Blue Shield, who on November 1 will assume the presidency of the American Hospital Association. After a 5-month search by the American Hospital Association, he was appointed to succeed long-time president Edwin L. Crosby, M.D., recently deceased. Mr. McMahon's appointment has caused considerable interest in North Carolina, particularly among the members of the N.C. Medical Society, with whom he has worked most effectively during the past several years in connection with problems involving both the Medical Society and NCBCBS.

Sincerely,



John Glasson, M. D.
President

ALCOHOL AND HIGHWAY FATALITIES

A Study of 961 Fatalities in North Carolina During the Last Six Months of 1970

Arthur J. McBay, Ph.D.*

IT HAS been estimated that between 25 and 30 thousand lives could be saved yearly in the United States if the alcohol-impaired operator and pedestrian could be excluded from the highways. The number of those injured and the economic losses sustained are tremendous. In North Carolina about 1,000 traffic deaths may be attributed to alcohol-impaired individuals each year (Table 1). We cannot afford to continue to pay this exorbitant price for the convenience of the relatively small fraction of our people who have drinking problems and use the highways.

In an effort to study the problem, all reports of fatal accidents occurring in North Carolina during the second half of 1970 were reviewed with respect to involvement of alcohol. These reports were correlated with alcohol levels in blood samples submitted to the toxicology laboratory of the Office of the Chief Medical Examiner, and with other information obtained from the Highway Patrol and Department of Motor Vehicles. During this period there were reports on 961 fatalities—467 operators, 306 passengers, and 188 pedestrians being killed.

TYPES OF CRASHES

Single-vehicle crashes

There were 223 single-vehicle crashes in which only the operator was killed. One hundred sixteen of these operators were tested (52 per cent), and

82 were found to be impaired (71 per cent of those tested). Table 2 shows the breakdown of these data.

There were 118 single-vehicle crashes in which 128 passengers only were killed (Table 3). Of the 118 operators involved, only 21 were tested (18 per cent), and 17 were found to be impaired (81 per cent of those tested).

There were 20 single-vehicle crashes in which 25 passengers and 20 operators were killed. Eleven of the operators were tested (55 per cent) and 7 were found to be impaired (63 per cent of those tested), as shown in Table 4.

Multiple-vehicle crashes

There were 153 multiple-vehicle crashes involving 325 operators. Of 152 operators killed, 59 were tested for alcohol (38 per cent); 26 were found to be impaired (44 per cent of those tested). Of the 171 operators who survived, only 8 were tested for alcohol (5 per cent), and 2 were found to be impaired (Table 5).

There were 81 multiple-vehicle crashes in which 96 passengers were killed and 178 operators were involved. Ten of the operators were tested (6 per cent) and 6 were found to be impaired (Table 6).

There were 44 multiple-vehicle crashes in which 57 passengers and 53 operators were killed. Ninety-three operators were involved. Thirty-eight of the operators killed (71 per cent) were tested for alcohol and 13 were found to be impaired. Of the 40 operators who survived, 7 were tested (17 per cent), and 5 of these were impaired (Table 7).

Pedestrian fatalities

One hundred eighty-eight pedestrians were killed in accidents involving 187 operators. Forty-six of

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Request for reprints to Office of the Chief Medical Examiner, P. O. Box 2488, Chapel Hill, N. C. 27514.

these pedestrians were less than 16 years of age; 45 operators were involved in their deaths. None of the pedestrians or operators in this group were tested.

One hundred forty-two pedestrians aged 16 years or older were killed. Eighty-two were tested (58 per cent), and 52 were found to be impaired (63 per cent of those tested). Of the 142 operators involved in these deaths, the 4 who were tested were all found to be impaired (Table 8).

OVER-ALL FINDINGS

Of the 1,158 operators involved in all fatalities, 432 were killed; 224 of those killed were tested (52 per cent), and of these, 128 were impaired (57 per cent). Of the 694 operators who survived, 50 were tested (7 per cent), and 34 were impaired (68 per cent of those tested) (Table 9). About half of the operators who died on the highway and about half of the pedestrians killed were tested for alcohol. More than half of these were found to be impaired.

Only 7 per cent of the surviving operators were tested, more than half of whom were found to be impaired. It is imperative that in the majority of accidents involving the deaths of either or both pedestrians and operators, the victims be tested for alcohol. It is also imperative that surviving operators involved in the death of pedestrians be required to submit to chemical testing.

The police officers completing accident reports stated that 34 operators had not been drinking. Tests proved that these operators were impaired or drunk. Only 11 of the 264 dead operators tested had blood alcohol concentrations as low as 0.01-0.04 per cent. This is 4 per cent of those tested. Among the operators killed, the small representation of those having a very small concentration of alcohol in the blood has been noted. It is possible that such an operator, fearing to be stopped by an officer after drinking even this small amount of alcohol, drives more carefully than usual. This point warrants attention and further research.

Of the 274 operators involved, 132 (almost half of those tested) had blood alcohol concentrations of 150 mg/100 ml (0.15 per cent) or more. This concentration greatly exceeds that found in social drinkers. Motor vehicle operators whose blood alcohol concentration exceeds this amount probably have a drinking problem, since they have developed some tolerance. When drivers killed in motor accidents are found to have these relatively high levels of alcohol in the blood, they should be examined for damage to the liver due to alcohol, and their driving records should be reviewed with respect to previous drinking and driving problems. Waller¹ noted a definite correlation between liver damage, poor driving records, high concentrations of blood alcohol, and operators killed in auto crashes. The fact that he found no increase in the number of such deaths

Table 1

North Carolina Highway Fatalities: July-December 1970

	Number
Accidents	828
Operators involved	1158
Operators killed	467
Operators survived	691
Passengers killed	306
Pedestrians killed	188
Total	961

Table 2

Single Vehicle Crashes: Operators Killed

	Number
Crashes	223
Operators killed	223
Operators tested for alcohol	116
Impaired*	82
Had been drinking†	7
Sober‡	25
Operators not tested	107

* Impaired: Blood alcohol concentration of 0.10% or more.
 † Had been drinking: Blood alcohol concentration of 0.01%-0.09%.
 ‡ Sober: Blood alcohol test—negative.

Table 3

Single Vehicle Crashes: Passengers Killed, Operators Survived

	Number
Crashes	118
Passengers killed	128
Operators involved	118
Operators tested	21
Impaired	17
Had been drinking	2
Sober	1
Operators not tested	97

Table 4

Single Vehicle Crashes: Operators and Passengers Killed

	Number
Crashes	20
Passengers killed	25
Operators killed	20
Operators tested	11
Impaired	7
Had been drinking	2
Sober	4
Operators not tested	9

Table 5

Multiple Vehicle Crashes: Operators Killed

	Number
Crashes	153
Operators involved	325
Operators killed	154
Dead operators tested	59
Impaired	26
Had been drinking	4
Sober	29
Dead operators not tested	95
Operators survived	171
Live operators tested	8
Impaired	2
Sober	6
Live operators not tested	163

Table 6
Multiple Vehicle Crashes:
Passengers Killed, Operators Survived

	Number
Crashes	81
Passengers killed	96
Operators involved	178
Operators not tested	168
Operators tested	10
Impaired	6
Had been drinking	4
Sober	0

Table 7
Multiple Vehicle Crashes
Passengers and Operators Killed

	Number
Crashes	44
Passengers killed	57
Operators involved	93
Operators killed	53
Dead operators tested	38
Impaired	13
Had been drinking	6
Sober	19
Operators survived	40
Live operators tested	7
Impaired	5
Sober	2

Table 8
Pedestrian Deaths

	Number
Accidents	181
Pedestrians killed	188
Operators involved	187
Pedestrians under 16 years of age killed	46
Operators involved	45
Tests for alcohol	0
Pedestrians over 15 years of age killed	142
Pedestrians tested	82
Impaired	52
Had been drinking	4
Sober	26
Pedestrians not tested	60
Operators involved	142
Operators tested	4
Impaired	4
Operators not tested	138

Table 9
Operators Involved and Tested

Operators Killed		Number	Tested	Impaired
Vehicles	Killed			
Single	Operator	223	116	82
Single	Operator and passenger	20	11	7
Multiple	Operator	156	59	26
Multiple	Operator and passenger	53	38	13
Sub-Total		432	224 (52%)	128 (57%)
Operators Survived		Number	Tested	Impaired
Vehicles	Killed			
Single	Passenger	118	21	17
Multiple	Operator	171	8	2
Multiple	Passenger	178	10	6
Multiple	Operator and passenger	40	7	4
—	Pedestrian	187	4	4
Sub-Total		694	50 (7%)	34 (68%)
Totals		1126	274 (24%)	162 (59%)

during the Christmas season led him to the opinion that he was not dealing with social or "binge" drinkers.

Waller² also reported observations on the identification of problem drinking among drunken drivers. A high correlation was found between two or more arrests involving drinking and an impression of problem drinking. Eighty-seven per cent of the drunken drivers were known to community agencies, the majority having had multiple contacts starting before the age of 30 years.

LIQUOR SALES AND DRINKING PATTERNS IN NORTH CAROLINA

North Carolina appears to be representative of the southeastern part of the United States, which apparently leads the nation in the percentage of deaths associated with high concentrations of alcohol in the blood—that is, 400 mg/100 ml (0.4 per cent) or greater. Liquor is available throughout the state in legally controlled stores and through illegal sales of legal or illegal liquor. The apparent consumption of alcoholic beverages in North Carolina in 1968 was about 1.7 gallons per capita in the drinking-age population as compared with the national average of 2.4 gallons. The 1967 death rate from alcoholic psychosis, alcoholism, and cirrhosis with mention of alcoholism was 19.6 per 100,000 adult males in North Carolina, and 15.9 in the nation.

During 1970 the North Carolina State Highway Patrol arrested 35,348 operators for driving under the influence; 29,082 (82 per cent) were tested, 14 per cent refused to be tested, and tests were not available for 0.5 per cent. Of those tested, 26,370 had blood alcohol concentrations of 0.1 per cent or greater.

The courts adjudicated 32,419 cases as follows:

	%
Guilty as charged	66.4
Not guilty	7.5
Nol-prossed	8.9
Guilty of lesser offenses	17.2
Conviction with penalty	83.6

In North Carolina hard liquor is not sold by the drink, but may be purchased in sealed bottles at state controlled liquor stores. Public places are licensed to allow patrons to mix their own drinks from bottles they bring with them. Beer and wine may be sold in licensed stores and bars. The effects of illicit or "moonshine" liquor on the drinking patterns in this state are unknown, but the indications are that it may have considerable impact.

It must be concluded that the drinking driver is the predominant factor in deaths and serious injuries on the highway. More than half the deaths of males aged 15-24 years occur in road accidents.³

The Problem Drinker

The greater part of the trouble appears to be produced by the problem drinker. Present measures do

not seem to be successful in preventing the drinking driver from operating on the highway. He is not often discovered and actually convicted. Death seems to be the only certain way in which he is removed from the highway. Suspending or revoking his license has not prevented him from continuing on his hazardous course.

The problem drinker is well known to those around him, although they may not be willing to concede that there is a problem. It is unlikely that his friends will reveal him. The driving records of operators killed in auto crashes reveal evidence of previous alcohol-related problems. Special attention should be concentrated on these individuals until it can be shown that they are no longer likely to have a drinking problem.

Many counter measures have been used in attempts to stop the carnage caused by the alcohol-laden operator. It is becoming apparent that isolated attacks on the problem are not producing the anticipated results. Part of the problem is the nature of the effects of alcohol on the individual. A few drinks cause the imbibor to lose his inhibitions and the ability to judge how much he is affected by alcohol. This lack of judgment leads him to overrate his ability to operate a motor vehicle properly. In many cases he must be forcibly prevented from driving. Making excuses for his drunken behavior only encourages him to continue his destructive habits. Every effort to discover the problem drinker and driver must be made. When discovered, he must be treated firmly and prevented from operating a motor vehicle until it is shown beyond any doubt that he no longer has a drinking problem.

Enforcement problems

The driving records of 107 operators who were involved in single-vehicle crashes which killed the driver or his passenger during the last half of 1970 have been studied. Of those whose blood contained no alcohol, 11 had no prior records; one had a record of speeding.

Of those who had enough alcohol to influence their driving, 13 had no prior records, 82 had such records, 21 had a prior conviction of driving under the influence, and 58 had had one to nine prior accidents. Eight of 13 surviving drivers found to be under the influence at the time of crashes that killed their passengers were not convicted of any charge; 2 have had another accident within a year. Of the 5 remaining, 3 were convicted of driving while under the influence, one of involuntary manslaughter, and one of reckless driving. Thus only 3 of 13 operators involved in fatal accidents while under the influence of alcohol were convicted of that charge.

There is a mechanism for stopping and arresting an erratic driver observed by a law enforcement officer; however, most accidents occur without an officer present. Thus the investigating officer cannot

make an arrest for drunken driving because he was not a personal witness. If he cannot obtain the evidence, he cannot make an arrest; if he is unable to make an arrest, he cannot require a breathalyzer test under implied consent even if the driver could be safely tested. He has no authority to obtain a blood sample. Thus we face the dilemma that those who perpetrate the worst driving offense—taking the life of another person—are rarely convicted of driving while under the influence or of involuntary manslaughter. It would be desirable to have legislation requiring all drivers who survive fatal accidents to be tested for alcohol unless such a test would endanger their own safety.

SUGGESTED REMEDIES

Information concerning the effect of drinking alcoholic beverages should be introduced into the educational system in the early grades. North Carolina law requires that students be instructed about alcohol as a part of their program in the schools.

Better methods of controlling the distribution and consumption of liquor must be instituted. Particular emphasis must be placed on the problem of excessive drinking in a setting which obliges the imbibor to operate a motor vehicle after a drinking bout. If a person does drink too much, transportation should be provided so that he does not have to drive while under the influence.

Every possible effort should be made to discover the problem drinker early. It should be illegal to drive on the highway with more than 0.08 per cent (80 mg/100 ml) in the blood. The law enforcement officer should be able to give an on-the-scene chemical test to operators who have been stopped for any moving traffic violation if he suspects that they have been drinking. Any operator who has been arrested for driving under the influence of alcohol or who has survived a death-producing accident should be required to submit to a chemical test or lose the privilege of driving. The above standards set by the Highway Safety Program have not been implemented in North Carolina (Highway Safety Standard 8: "Alcohol in Relation to Highway Safety." Department of Transportation, June, 1969).

Another means of discovering the problem drinking driver would be to require operators rather than vehicles to be insured. In this way, not only would the Bureau of Motor Vehicles have the driving record of each operator, but the insurance companies would have records of all operators for whom claims had been paid. Insurance rates could then be based on the actuarial data of individual drivers.

When the operator is tried in court, reduction of the charge or leniency in sentencing only fortifies his belief that he has done nothing seriously wrong. Allowing him limited driving privileges also postpones any possible solution to his problem. Those who continue to drive after suspension or revocation

of their licenses should be jailed. It is apparent that nothing less will prevent the offender from continuing on his destructive course.

The alternatives open to the court for those convicted of driving while under the influence of alcohol have not solved the problem of the drunken driver. The case may be nol-prossed or continued; the defendant may be found not guilty or guilty and fined, or given a suspended or an active sentence. Another alternative would be to prohibit the person from operating a motor vehicle while receiving treatment for his drinking problem and to return the privilege when some assurance could be given that he would not again drink and drive.

Still another alternative might be to sentence those found guilty of this offense to serve in a minimum security center. The sentence could be served on weekends or nights or both so that the prisoner could continue to earn a living. Anyone guilty of not reporting as sentenced or of escaping could then be placed in a more secure prison. Committing other alcoholics with serious problems to the same center might be mutually beneficial.

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2. Waller JA: Identification of problem drinking among drunken drivers. JAMA 200:114-120, 1967.
3. World Health Organization, World Health Statistics Annual 1967, Volume 1, Geneva 1970.

Many diseases proceed from want of due care in child-bed; and the more hardy part of the sex are most apt to despise the necessary precautions in this state. This is peculiarly the case with young wives. They think, when the labour-pains are ended, the danger is over; but in truth, it may only then be said to be begun. Nature, if left to herself, will seldom fail to expel the faetus; but proper care and management are certainly necessary for the recovery of the mother. No doubt mischief may be done by too much as well as by too little care. Hence females who have the greatest number of attendants in child-bed, generally recover worst. But this is not peculiar to the state of child-bed. Excessive care always defeat its own intention, and is generally more dangerous than none at all. — William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 362-363.

Rehabilitation of Patients with Spinal Cord Injuries

Edwin T. Preston, M.D.

PERRY¹ has defined rehabilitation in the following way:

Rehabilitation refers to those definitive measures which are directed towards lessening the sequelae of a permanent disability. This concept contrasts with the goal of traditional medicine which is to cure the disability and return the patient to normal. Failures to cure are considered regrettable outcomes of an imperfect system; they are listed as a statistical reminder that we must do better the next time. Thus it becomes easy to put these failures out of our minds and exert minimal effort toward salvaging the residual.

The real difference between curative and rehabilitation medicine, then, is the type of patient being treated and the extent of the treatment, not the techniques themselves. The goal of rehabilitation is to minimize the residuals of what usually is a severe permanent disability. Thus, although restoration of normal function may be far from possible, returning the patient to useful activity can best be achieved if all the means which may improve a patient's capacity to function are provided. Such measures, most certainly, include appropriate reconstructive orthopaedic surgery as well as physical and occupational therapy, bracing, social service, and psychological counseling.

The concept is further elaborated in the following way:

To be maximally effective, rehabilitation should be instituted as soon after injury as possible. It must include more than physical rehabilitation, it must also be concerned with psychologic and emotional, sociologic, educational and vocational rehabilitation. The patients must be prepared to re-enter society as dignified, self-supporting tax-paying individuals, using all their potential and capacity. They must be converted from helpless, hopeless patients dependent on others to confident men and women with a future, who are caring for themselves and their families and contributing to society in general.

INCIDENCE

The incidence of spinal cord injuries is difficult to determine. It has been reported that in the United

States there are approximately 100,000 quadraplegic or paraplegic persons, and probably about 10,000 new victims of spinal cord injuries each year, half of whom are paraplegic and the other half quadraplegic.² Another common estimate is that there are approximately 5 spinal cord injuries per year per 1,000,000 population. This would indicate that there are about 25 new cases in the state of North Carolina each year. A recent survey of the quadraplegics in North Carolina identified approximately 492 cases (personal communication from Dr. Edwin H. Martinat).

A recent survey of the incidence of paraplegia and quadraplegia in Switzerland found that for the years 1960 through 1967, new cases increased at an average rate of 4 percent per year against an average population increase of 2.3 percent. These new cases represented an incidence of 15 patients (10 paraplegics, 5 quadraplegics) per million of the total population. An additional 2 to 3 million nontraumatic paraplegics were estimated. Extrapolated to America's 200,000,000 population, these data yield a figure of better than 3,000 new traumatic cases (1,000 quadraplegics, 2,000 paraplegics) per year, plus 450-550 nontraumatic paraplegics.

Spinal cord injuries in the young male occur largely between the ages of 15 and 30 years. The types of accidents in the Swiss study were given as road accidents 36 percent, work accidents 35 percent, and home and sport accidents 29 percent. Of the last group, one third were due to attempted suicide, one third to diving accidents, and one third to miscellaneous causes.³

COSTS

In a study sponsored by the National Research Council in 1967, the average cost of medical care in 1968 for one paraplegic for lifetime management was estimated at \$77,350. If wage and tax losses are

Read before the Section on Orthopaedics and Traumatology, North Carolina Medical Society, Pinehurst, May, 1971.

From the Department of Surgery, Division of Orthopaedics, University of North Carolina School of Medicine, Chapel Hill, N. C. 27514.

added to this figure,⁴ the total cost to society for this patient would be an estimated \$241,000. If the figure is then adjusted for inflation, according to 1968 statistics, the total loss would amount to \$344,000. This figure does not include payment for workmen's compensation, social security, group benefits, personal insurance, welfare, or loss of productivity. In many cases, the total cost exceeds even this amount. The study estimated that, on the basis of these calculations and the estimated number of spinal cord injured patients in the United States at that time, the total cost to society would amount to approximately \$2,000,000,000 over the succeeding 20 years.¹ The overall costs would be higher if the figures obtained in the Swiss study were used.

PRINCIPLES OF MANAGEMENT

Between World Wars I and II, developments in the techniques of management of these patients brought forth the principles of prevention of bed sores, the use of skull tong traction by Crutchfield, and the concept of intermittent automatic aseptic bladder tidal drainage by Munro. Approximately 50 percent of the 4,000 victims of spinal cord injuries in World War II were alive ten years after the war as a result of a major effort to control complications. In a nearly ideal setting for the management of spinal cord injured patients, the National Spinal Cord Center at Stoke-Mandeville Hospital in England showed that 85.4 percent of its 3,000 paraplegics and quadraplegics were employed gainfully in 1963; 54.5 percent of these were employed full-time in a variety of jobs in business, etc., and the remainder had home occupations.⁵

It became apparent after World War II that the services of many medical and paramedical specialists are required in managing these patients. The epitome of this concept has been reached at the Rancho Los Amigos Hospital in Downey, California.⁶ This is a spinal cord injury center which serves a good portion of the southwestern United States, but largely serves Southern California and Los Angeles County.

Adequate rehabilitation of these patients requires that treatment be started as soon after the injury as possible. When the patient has recovered from the acute phase of the injury and may be safely mobilized, a comprehensive program is instituted. The initial goal is to educate the patient about his injury, his limitations and prospects for further improvement, about possible complications and ways to prevent them, and about his future expectations.

He is started on a physical therapy program to prevent fixed joint contractures which would further handicap him. He is taught balance in sitting and how to transfer from bed to wheelchair and from chair to toilet. If his lesion is at the level of the tenth thoracic vertebra or lower, his legs are braced and he is trained to walk with crutches. If the lesion is higher than the tenth thoracic vertebra, he is trained in

wheelchair activities. He is instructed to check his skin twice a day for pressure points and impending ulceration, and is instructed to boost himself away from his chair every 15 to 20 minutes while sitting in order to relieve pressure on the skin. He is started on a bowel-training program designed to get him on a regular automatic evacuation program, and he is also taught how to manage his indwelling urethral catheter with daily irrigations. The occasional patient who does not require a catheter is taught to empty his bladder on a schedule by a combination of reflex activity and the Credé maneuver.

A paraplegic patient may often be made entirely independent in self-care within about two to three months. A quadraplegic who has the capacity to become independent (one with a low cervical cord injury with reasonably good upper extremity function) may expect to achieve this goal in three to four months.

This education and training program requires the combined efforts of the orthopaedic surgeon, the urologist, occasionally the neurosurgeon, and the rehabilitation nurse, physical therapist, occupational therapist, and social worker.

The patient is seen early in his rehabilitation program by the vocational rehabilitation counselor, who evaluates his background and then works out with him a program designed to train him for gainful activity.

Once discharged from the rehabilitation unit the patient is seen periodically in the clinic for a genitourinary evaluation and general medical follow-up.

CONCLUSION

At present the resources in this state for the management of patients with spinal cord injuries are limited. The Division of Vocational Rehabilitation and its Advisory Committee for the Evaluation of Rehabilitation Facilities in North Carolina has recently submitted a program to the General Assembly requesting that a statewide system of regional rehabilitation centers be established for the purpose of handling patients with spinal cord injuries, and other patients who are chronically ill and permanently disabled.⁷

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Primary Pulmonary Aspergillosis

A Case Report

Laxmidas A. Sawkar, M.D.,* John M. Dickerman,
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SAPROPHYTIC colonization due to *Aspergillus fumigatus* in pre-existing pulmonary tuberculous cavities, cavitary histoplasmosis, cystic disease of the lung, and other chronic pulmonary diseases has been extensively described.¹⁻⁴ The pulmonary invasive character of this fungus has been reported in cases of leukemia, lymphoma, and other malignant diseases, and in patients being treated with antimetabolites, steroids, and other immunosuppressive drugs. The primary pulmonary infection due to *A. fumigatus* is rare. Because of its fulminating course and unusual features, the following case of primary necrotizing pulmonary aspergillosis is reported.

REPORT OF A CASE

A 43-year-old Negro man, a worker in a tobacco factory, gave a history of cough productive of sticky white sputum, associated with progressive shortness of breath, diffuse bilateral chest pain, and progressive weakness of four weeks' duration. Because of the worsening symptoms and lack of response to household remedies, he was taken to the emergency room of the local hospital. He was referred to our hospital after chest films were found to be abnormal at the first hospital.

A positive reaction to a routine tuberculin skin test had been reported four years previously. However, a chest roentgenogram obtained at that time was reported normal, and the patient had not taken any prophylactic drugs. He gave a history of frequent

consumption of alcoholic beverages for many years.

On admission the patient was delirious and appeared to be in acute respiratory distress. He was acutely ill and evidenced generalized wasting of tissue and moderate dehydration. His mouth showed signs of poor oral hygiene, with dental caries and pyorrhea. He did not appear to be cyanotic. There was no clubbing of fingers. The rectal temperature was 102 F; the pulse rate 120, and the respiratory rate 44 per minute. The blood pressure was 118 systolic, 82 diastolic.

There were signs of consolidation and crepitant moist rales scattered throughout the chest. The heart could not be clinically evaluated because of tachycardia and many adventitious sounds. However, the neck veins were not engorged, and there was no pitting edema of the dependent parts of the body. The liver was barely palpable below the right costal margin. The spleen and kidneys were unremarkable, as were the remaining physical findings.

The sputum was sticky, mucoid and frothy, and free of blood. Microscopic examination disclosed a few pus cells per high power field. Smear examinations, and subsequently cultures, did not show acid-fast bacilli. Potassium hydroxide slide preparation disclosed many hyphae. The cultures, after 36 hours, revealed a profuse growth of *Aspergillus fumigatus*.

The chest roentgenogram (Fig. 1) showed extensive bilateral pulmonary infiltrations with blunting of the right costophrenic angle. The cardiac shadow appeared normal. A complete blood examination revealed the following values: hemoglobin, 10 gm/100 ml; hematocrit, 33 vol percent; 21,000 leukocytes/cu ml with 54 percent segmented neutrophils, 13 percent unsegmented neutrophils, 19 percent lympho-

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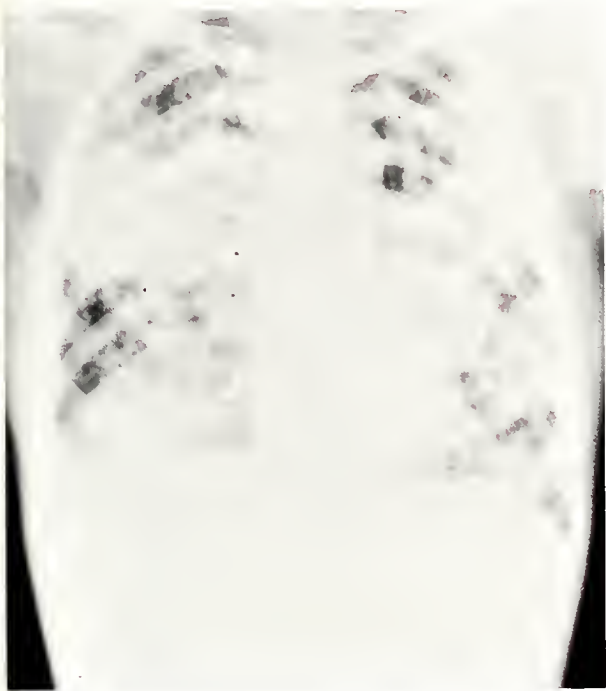


Fig. 1. Posteroanterior view of the chest, showing extensive bilateral pneumonic infiltrations involving both the lungs. There is also minimal fluid at the right base.

cytes, and 5 percent myelocytes. Platelet count was 300,000/cu ml. Results of urinalysis were normal. The blood urea nitrogen was 20 mg/100 ml; serum proteins were 6.0 gm/100 m. (albumin 2.5, globulin 3.5). A serum protein electrophoresis subsequently showed diffuse hypergammaglobulinemia characteristic of liver disease. Analysis of blood gases from the left brachial artery revealed mild hypoxia and an oxygen saturation of 88 percent; pCO_2 was 36 mm of Hg and the pH was 7.38. The blood cultures taken on admission were subsequently reported to be sterile.

Administration of a 5 percent solution of dextrose in normal saline was started through the intravenous catheter. The central venous pressure was monitored intermittently. Because of the patient's previous positive reaction to a tuberculin skin test, a daily regimen of 1 gm of streptomycin sulphate, administered intramuscularly, 300 mg of isonicotinic acid hydrazide and 800 mg of ethambutol was prescribed. Prednisone, 10 mg every six hours, was also prescribed, and a 24 percent concentration of oxygen was given by venturi mask. With this treatment the patient began to show signs of gradual improvement. Then, after 16 hours' stay in our hospital, he suddenly died.

Autopsy findings

On autopsy performed 12 hours later, the right lung weighed 1400 gm and the left 1240 gm. Both lungs were heavy and consolidated, and the surface felt nodular. The bronchi were filled with frothy mu-



Fig. 2. Photomicrograph of lung section showing extensive infarction and necrosis. (Hematoxylin and eosin, x 50.)

cus. The cut surfaces revealed multiple firm, white, necrotic-looking nodules ranging from 0.2 to 2.0 cm in size. Microscopic examination (Figs. 2 and 3) showed these nodules to be abscesses, infarctions with necrosis surrounding the dense areas of fungal growth. The fungus was cultured and identified⁴ as *Aspergillus fumigatus*.

The liver weighed 2100 gm. It appeared to be slightly enlarged and firm; the surface was smooth and shiny. Microscopic examination revealed centrilobular metamorphosis and fatty degeneration.

The heart, kidneys, and pancreas were marked by mild interstitial fibrosis. The rest of the organs appeared normal.

COMMENT

Using the uncomplicated diagnostic measures that are presently available, it is almost impossible to make an antemortem diagnosis of primary invasive pulmonary aspergillosis.⁵⁻⁶ *A. fumigatus* is the most frequently seen contaminant in sputum cultures.⁴ Its presence in the sputum is not sufficient evidence on which to base a diagnosis, since it can be cultured from many sources and from the atmosphere.⁸ However, because of its rare pathogenic characteristics, it is also unwise to question its significance in the sputum. Even in proved cases of metastatic infections due to *A. fumigatus*, blood cultures have failed to show the growth of the organism.⁶ In recent years much research has been directed toward the diagnosis of this infection with skin tests, complement fixation tests, and fluorescent antibody tests.⁵⁻⁶ None of them, however, has proved superior to

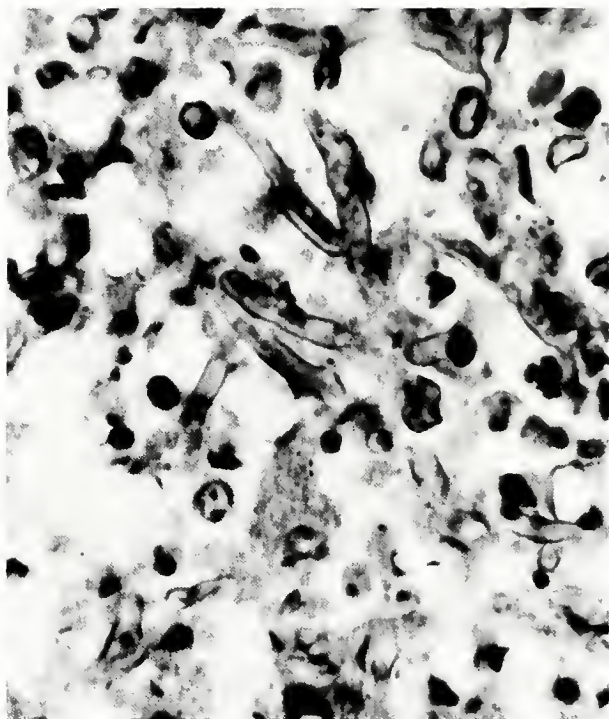


Fig. 3. Photomicrograph of lung section showing hyphae of *A. fumigatus*. (Hematoxylin and eosin, x 1200.)

existing measures. The repeated positive sputum cultures have been a useful diagnostic aid. Since the course of the primary pulmonary aspergillosis is fulminant, the patient is likely to die before repeated positive cultures are obtained.

In the present case, the preliminary impression was pulmonary tuberculosis because of the past history of positive tuberculin skin reaction and the present clinical picture. By the time *A. fumigatus* was isolated from sputum, the patient was already dead. Even if we had had the positive culture prior to death, it would have been difficult to decide to give amphotericin-B because of the often contaminant nature of *A. fumigatus*.

Invasive secondary pulmonary infection due to *A. fumigatus* has been extensively described in cases of leukemia, lymphoma, sarcoidosis, pulmonary cystic disease, terminal cancer, and other tuberculous and nontuberculous pulmonary cavities.¹⁻⁴ The infection has also been reported in patients undergoing treatment with steroids, immunosuppressive drugs, and other anticancer agents. However, its occurrence as a primary infection in the absence of the above disorders is reported to be extremely rare.¹⁻⁴ The present patient had none of these disorders. He had been a chronic alcoholic, however, and alcoholic imprints had been left on the liver, pancreas, and heart.

Recently alcohol has been shown to interfere with mobilization of leukocytes in normal persons, which probably explains the increased susceptibility of alcoholics to infections.² Chronic alcoholics are unable to mobilize leukocytes because of deficiency

of folic acid; they also lack protein because of neglect of the diet.² These factors probably were responsible for the invasive course of *A. fumigatus* in our patient.

The characteristic pulmonary lesions show necrotizing bronchopneumonia or lobular pneumonia.⁴ Microscopically, these lesions are found to be small abscesses, areas of infarctions, and necrosis surrounding the more dense areas of fungal growth. Often blood vessels are also invaded. The endotoxin released by fungi is a thermolabile substance and has been reported to show pronounced histotoxic effect in laboratory animals.⁸

Various antifungal agents^{3-4, 7-9} have been used in treating pulmonary aspergillosis. Investigators^{3-4, 7-9} have reviewed the efficacy of amphotericin B, nystatin, natamycin, hydroxystilbamidine and iodides. Kennedy and his co-workers⁸ successfully treated three of their patients with natamycin inhalation therapy. Veddar and Schorr⁹ have reported the successful use of nystatin inhalation therapy in a 3½-year-old child. In some individual cases reported in the literature amphotericin B was conclusively effective;¹⁰⁻¹² but, in a cooperative study conducted by the National Communicable Disease Center, the effectiveness of this drug in pulmonary aspergillosis was uncertain.¹³ The American Thoracic Society's Committee on Therapy recommends amphotericin B as the drug of choice in the treatment of aspergillosis.¹⁴

SUMMARY

A case of primary pulmonary aspergillosis in a 43-year-old Negro alcoholic male is described. The problems of antemortem diagnosis, fulminant course, and autopsy findings of the disease are discussed. The possible role of chronic alcoholism as a predisposing cause of this infection has been discussed.

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Dorothea Dix: Victorian Militant

George W. Paulson, M.D.

IN this day of Women's Lib and commitment to social change by militants of both sexes, it may be of interest to review briefly the life of a woman whose efforts are still felt in North Carolina, since her name is linked with the first major psychiatric hospital established in this state.

EARLY YEARS

Dorothea Lynde Dix had a life about which she said: "The whole of my years, from the age of ten to the present, differ essentially from the experiences and pursuits of those around me." Many people have a similar view, but this sense of personal uniqueness was peculiarly valid for Dorothea, the Victorian militant. She was born in New England, and always looked like a well scrubbed descendant of a Massachusetts Pilgrim. Her long hair was pulled back in a severe bun, her clothes were always simple and modest, and she usually dressed in grey or black. Her early life was one of physical movement with episodes of despair, due largely to the instability of her father, who had restless feet, shifting occupations, and episodic states of fanatical religious excitement. Before she was ten, Dorothea was employed in distributing religious tracts and memos, a habit that continued in one form or another all her life. At age ten, she is said to have run away from home in Worcester, Massachusetts, and put herself under the protection of her grandmother in Boston. Though neither her mother nor her grandmother figure con-

spicuously in her biography or letters, her grandfather, for whom "Dix Hill" in Raleigh was originally named, was very important to her. He was a successful and well respected physician, although said to have had a dictatorial manner which at times made him unpopular with his fellow citizens. Though his earlier life was also unsettled, by the time Dorothea joined him he was described as robust, consistent, and picturesque. She named Dixmount Hospital in Philadelphia as a tribute to her grandfather, who founded the town of Dixmount, Maine.

The demands made on her were always rigorous and beyond her years and strength. According to Tiffany,¹ her childhood put iron into her blood but "ossified all lovelier and sunnier capacities for affection." She was either forcefully struggling for some unfortunate, or against a legislature, or attempting to recoup her strength by a prolonged retreat to bed.

As a child, she was convinced she should prepare herself for some occupation by which she could win her bread, and she retained a tremendous need during her entire life for useful employment. She first started to teach at age 14, and she found it necessary to put on long skirts and to lengthen the sleeves of her dresses in order to look adult. Not satisfied with only a full week's work, she established a week-end school over the stable of the mansion for the training of "poor and neglected" children.

It was during these strenuous days that the first signs of lung congestion with repeated hemoptysis developed. We assume now that these episodes

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represented tuberculosis, though her strenuous life and ascetic approach to food may have led to other repeated infections as well. It is even possible that some never-revealed "female ailment" confined her to bed intermittently. Nevertheless, both she and her friends always attributed her illnesses to overwork and strain. She insisted that even ill health was useful, however. "I am never less disposed to sadness than when ill and alone. Sometimes I have fancied that it was the nature of my disease to create a rising, elastic state of mind, but be that as it will (I speak solemnly), the hour of bodily suffering is to me the hour of spiritual joy. It is then that most I feel my dependence on God and His power to sustain." She was a product of an earlier age which felt that everyone and everything had to have a useful purpose.

In one of her periods of illness and enforced rest, she arrived in the tropics and there had her first exposure to free Negroes. She was struck by the difference between free men and the slaves she had seen in the states.

They are in general handsome, much above the generalities of the white, with very fine figures and graceful beyond anything I have ever seen. Their voices in conversation are musical and their manners respectful. Sometimes their accents, especially those of the children, are soft and plaintive, touching the heart. For all this, they are in reality cheerful and happy . . . they are the most graceful dancers imaginable. They never make a false step, there is a heartiness, simplicity and ease with which they sustain their favorite amusement that draws the spectator into the most lively enjoyment of the exhilarating scene.

FROM HOBBY TO MISSION

After she recuperated and returned to teaching, it was apparent that her school, though quite successful, simply wasn't enough to consume her energy. Her grandmother had died, leaving her with an income which was sufficient for the moderate wants of a single woman, and by now, if not before, it was obvious that she would be a spinster. Useful she must be, and she was ripe for a new field. Her mind was full of the current religious and scientific ideas regarding human nature. Side by side with her religious beliefs regarding sin and its influence on the body was the view that in human nature, even in its most degraded forms, there is always a seed for "endless spiritual development."

In 1841, when she was about 40 years of age, Miss Dix accompanied a group of churchwomen on a brief visit to a jail and found among the prisoners a few insane people. She observed no stove in the damp room and immediately began efforts to publicize the plight of the prisoners. She bombarded the members of the legislature with personal visits, letters, and long, formal memoranda; and she proceeded at length and in detail to "briefly call your attention to the present state of insane persons confined within this Commonwealth in cages, closets, cellars, stalls, pens; chained, naked, beaten with rods, and lashed into obedience!"

In a few months, her hobby became a conviction which she reinforced from Maine to Florida, as she thoroughly documented the appalling fate of the insane whenever they were poor. Her approach to the various legislatures became standardized and well suited to her personality. Her main requirement was that her methods be effective. She rarely appeared in public and admitted that it was distasteful to her to do so. Her main approach was to locate two or three key members of the legislature, not necessarily the most famous members. Many a contented legislator must have been discomfited by a call from the insistent woman from Massachusetts. For some, she became a devoted member of the family. For example, in North Carolina when James Dobbin's wife was dying of a fatal illness, Miss Dix took care of her for the last weeks of her life. It was immediately after this that Dobbin returned to the legislature and made a passionate speech which then produced the first of the institutions for North Carolina. The episode was described by Dr. Eugene Grissom, Superintendent of the insane asylum at Raleigh.

The first appropriation bill looking to the erection of an asylum in North Carolina was defeated. Mrs. Dobbin, wife of Hon. James C. Dobbin, of Fayetteville, afterwards Secretary of the Navy, was very sick at Raleigh. Her husband was a member of the House. On her death-bed, she expressed to Miss Dix her deep gratitude for the tender care that noble woman had given her in her own illness, and, almost with her dying breath, begged her gifted husband to repay her own debt of gratitude to Miss Dix by another effort to pass the asylum bill.

Almost as soon as the last sad services of interment were ended, Mr. Dobbin entered the House, clad in the deepest mourning and broken with sorrow. He entered at once on the fulfillment of the duty he owed to the pious dead and the afflicted living. Feeling keenly his own bereavement and cherishing sympathy for the woes of others, sustained by the profound sympathy that moved every bosom, he redeemed nobly his last promise to a dying wife by a speech which made a great impression at the time, and the tradition of which has descended to this generation. . . . All was favorable to the orator. His own nature was moved to its very depths. His heart was softened and made tender by a distressing bereavement. Gratitude to Miss Dix, deep sympathy for the smitten of God, a yearning desire to help the unfortunate, all moved the gifted and generous North Carolinian, and he rose to the great demands of the occasion and the height of the argument, producing an oration rarely equaled. All opposition disappeared under the power of the eloquent and pathetic pleader, and the bill passed by an overwhelming vote.

It is fitting that Dobbin Hall of Dorothea Dix Hospital remains a repository for crippled, elderly and dying women.

Her stamina became legendary and her willingness to assail any legislature was feared. She took to the national scene, as has been documented,² with an effort to turn over 5 million acres of U.S.-owned land for the perpetual benefit of the insane. Rebuffed, she returned to ask for 12 million acres of federal land for the support of the mentally ill, as well as for the deaf and dumb. This bill passed both House and Senate, but was vetoed by President Franklin Pierce. If signed, it would have been at one

stroke a more significant and expensive piece of legislation than the current regional medical programs plus the bills to establish mental health clinics. She failed, or President Pierce did, and much of the land was used as subsidies to encourage the expansion of the early railroads.

Dorothea Dix refused, officially, to allow any of the institutions to be named for her. Nevertheless, North Carolina called its major institution "Dix Hill" for many years—ostensibly in honor of her grandfather.

Having almost singlehandedly changed both public opinion and legislation about mental illness, she turned to similar programs in Europe. She then busied herself with medical care for seamen, national programs in nursing, and a full quota of charitable tasks that now seem anticlimactic. Her major work was done. Hospitals for the mentally ill were established all along the eastern seaboard.

Her militancy and insistence on hard work and absolute devotion made it difficult for her to be an

effective chief of U.S. nurses during the Civil War. The newly emancipated, independent, and youthful nurses must have seen her as capable but austere, quaint, and old-fashioned. Her time as chief of nurses was marked by controversy, failure, and bitter disappointment. She worked better alone than with a group of young women. Her time as a leader had passed. As one reads the letters from this militant protector of the forgotten, she sounds peculiarly Victorian and full of flowery idealism. It is hard to imagine her as successful, but it is impossible to measure the significance of her work.

She died quietly as "one of the most honored women that America has ever produced," in an apartment at the state hospital in Trenton, referred to by her as "my first born child."

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The uterine flux may offend in quality as well as in quantity. What is usually called the fluor albus, or whites, is a very common disease, and proves extremely hurtful to delicate women. This discharge, however, is not always white, but sometimes pale, yellow, green, or of a blackish colour; sometimes it is sharp and corrosive, sometimes foul and foetid, etc. It is attended with a pale complexion, pain in the back, loss of appetite, swelling of the feet, and other signs of debility. It generally proceeds from a relaxed state of the body, arising from indolence, the excessive use of tea, coffee, or other weak and watery diet.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine, etc., Richard Folwell, 1799, p. 359.*

Editorials

THE PROSELYTING PUSHER

A new item (*Medical World News*, July 14, 1972, p. 5) concerning a west coast firm that will analyze street drugs for a fee quotes an official of the firm as saying that one LSD-using group would give the drug away free if possible. He was speaking of green or red pills selling for 18 cents each, and containing 450 micrograms of pure LSD, over twice the usual adult dose of 200 micrograms; one rumor had it that they were produced in those colors for Christmas sales.

As the first wave of horror passes at the thought of what harm such cheap, enormously powerful drugs might do to users who could well be little children, one can reasonably think about the motives of the makers and sellers of the drug. Most of us think that profit—enormous profit—is the ruling motive in the illegal drug trade, and this is no doubt the case in most instances. But there is a strong current of zealotism among what may be described as the philosophical school of drug users, mainly the young experimenters. In that group are many tal-

ented, well educated people capable of producing and marketing drugs of the high quality found by the California analysts. Similar—maybe even the same—groups also produce high quality bombs that have destroyed public and private property. We know that some of the bomb-producing lunatics have blown themselves up, but thus far have not been told about any of the drug-producing lunatics destroying themselves with their own chemicals. It is unlikely that even a spate of horror stories about drug producers becoming casualties of drug usage would deter the potential user. It may be that the availability of extremely cheap, high quality illegal drugs will do what some serious students of the drug scene advocate—remove the element of profit, and allow the drug susceptibles to either kill themselves or get over their tendencies. These commentators on the drug scene suggest that prohibition never works, and that ready access to drugs through normal channels is the only way to decriminalize the disease of drug addiction. The whole matter is such a mess that bizarre solutions might be the only ones.

The Medical Spectator

To the Editor:

Some ten years ago, having spent my hostility against the body politic and finding that I was writing when I had nothing to say, I took my collection of isolated but telling phrases into retirement from these pages, hoping that some of them might return later as full-blown paragraphs apposite and amiable. Since then, I have found many answers seeking questions, assembled a goodly collection of false facts, and pondered natural phenomenon begging explanation.

A recent editorial in your columns suggests that you too share my concern about the common and mysterious doings of our daily lives. But it seems to

me that beyond your question, Why Earlier Menarche?, lies a more recondite query, at least if I read your message right. Thusly, What of the Pineal Gland and Why? This structure, as we all know, drew the attention of the illustrious Descartes, attracted theological speculation (pardon my redundancy) and recently emerged as a source of a chemical, melatonin, yearning for a locus of action. The ovary seemed a logical target organ but the proper feedback diagram clarifying the reciprocity between the seat of the soul and fertility cults still seeks its designer.

The staff of the hardback culture gazette, *Horizon*, has also been concerned about the pineal gland in a

somewhat different context. In a recent issue devoted to consideration of the rites of spring, Sir James Fraser and inner serenity, its editor has chosen to present a worthy pictorial feature (would I could hear you yeleft gracefully), a Gallery of Gurus. Not since Westbrook Pegler was around to chastise Henry Agard Wallace, has the Guru received such appropriate treatment.

One portrait particularly interested me, that of Yogi Bhajan, who sits in bed right hand on heart (or at least on sternum), fingers spread with thumb at right sternoclavicular joint and just southwest of his Nehru jacket's top button; ball-point pens in his left breast pocket stretch upward toward his slightly opened mouth as if they ached to record their master's every word and provide symmetry for the raptly closed eyes. His forehead is spacious, his big nostrils are flared for adequate ventilation. A rug with tassels covers his legs; a flute or a recorder lies at the left of a blanket covering his left foot; his left hand rests on his knee and a needlework loop awaits a design.

My first impression was that he was a sufferer of spiritual angina, a Yoga with *Angst*. But the caption indicated a waning of my powers of diagnosis by inspection. "Thus, I have seen God. It is a light equal to millions and billions of rays of sunlight," says Yogi Bhajan. Yogi Bhajan runs an ashram, a monastery, in Los Angeles and is said to have 100,-

000 American disciples. He also directs a group known as 3 HO (Healthy, Happy, Holy organization) which helps propagate the faith. According to a 3 HO brochure, Yogi B is 'a spiritual revolutionary, aware that the science of yoga has been obstructed and polluted in the Western World and he has come to preach correct methods of physical and mental conditioning which will allow students to experience a real contact with the divine forces within'. Yogi B's enlightening technique invokes 'uncoiling the coiled energy under the navel points, raising it through the spinal column and injecting this energy into the pineal gland which has been described as the seat of the soul'. My eye was drawn to "3 HO (Healthy, Happy, Holy organization)" and free association took over as upon my inward eye danced not daffodils but 4 H-health, heart, hand, home. How this relates to melatonin, pineal gland and the uncoiling of coiled energy was unclear to me and I tried to work out chemical formulae of reactions between 3 HO and 4 H to no avail.

More recently I have learned that the biochemical approach to the problem of alcohol addiction has provided further facts seeking a synthesis. It has been revealed (*Lancet* 2:24, 1972) that certain chemicals make rats prefer ethanol rather than water and that the synthesis of certain aldehydes which may be related to addiction is promoted by ethanol itself. One of the compounds synthesized which may pro-

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vide an in vivo explanation for ethanol addiction, beta-carboline, has been detected in the rat. Apparently this compound may travel the same metabolic route as melatonin and be responsible for the nocturnal drinking habits of the addicted rat. At any rate, the pineal's melatonin-forming enzyme, hydroxyindole O-methyltransferase, is more active during the hours of darkness.

If this is the case, I am not sure that I want to

have any of my coiled energy uncoiled, particularly if it is going to find its way to the pineal during hours of darkness. If Dionysian revels were nocturnal, if the wine then flowed freely and the ancient rites of spring were fulfilled to strains of wild music because of beta-carboline, it may be better not to seek questions for some of our answers.

Yours in perplexity,

THE MEDICAL SPECTATOR

Bulletin Board

NEW MEMBERS of the State Society

NEW MEMBERS FROM THE STATE SOCIETY

Hinshaw, Arned Lee, MD (ObG), 306 S. Gregson St., Durham 27705
 Millward, David Kent, MD (I), 1300 St. Mary's St., Raleigh 27605
 Noah, Van Batchelor, MD (Oph), 3511 Horton St., Apt. 204, Raleigh 27607
 Riddick, George Walton, Jr., MD (Oph), 1907 Hardee Rd., Kinston 28501
 Roisum, Bryant Harvey, MD (P), 30 Winchester Circle, Salisbury 28144
 Taylor, Thomas Lee, MD (R), 807 W. Webster Dr., Dunn 28334
 Warlick, John Thomas, MD (U), 1024 Nottingham Dr., Gastonia 28052

WHAT? WHEN? WHERE?

In Continuing Education September, 1972

I. Current Events in North Carolina Sept. 15-16

1972 Walter L. Thomas Symposium on Gynecological Malignancy and Surgery
 "Why Cancer Treatment Fails and Its Subsequent Management, Hormonal Aspects of Endometrial Cancer and Urinary Incontinence Problems"
 Place: Duke University Medical Center, Durham
 Open to: Practitioners and residents in Obstetrics and Gynecology
 Sponsored by: Department of Obstetrics and Gynecology, Duke University Medical Center
 For Information: William T. Creasman, M.D., Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, 27710

Sept. 27-Oct. 1

State Medical Society Committee Conclave

Place: Mid Pines Club, Southern Pines
 For Information: Mr. William N. Hilliard, Executive Director, Post Office Box 27167, Raleigh, 27611

Oct. 2-6

"Development of Leadership Skills"
 Place: Continuing Education Program, School of Nursing, University of North Carolina at Chapel Hill
 Tuition Fee: \$100
 For Information: Bonnie K. Hensley, Asst. Professor, UNC School of Nursing, Carrington Hall, Chapel Hill, N. C. 27514

Oct. 6

Forsyth County Heart Association Symposium
 "Left Ventricular Outflow Obstructive Disease"
 "The Detection of Cardiovascular Disease of Children in Office Practice" Speaker—Mary Allen Engle, M.D.
 "Myocardial Revascularization—The Cleveland Clinic Experience"
 "The Surgical Mission of Myocardial Revascularization" Speaker—Donald B. Effler, M.D.
 "Pathological Findings in Pre-Hospital Deaths Due to Coronary Atherosclerosis"
 "The Geographic Pathology of Coronary Atherosclerosis" Speaker—Robert Foster Scott, M.D.
 Place: Holiday Inn West, Winston-Salem
 Sponsored by: Forsyth County Heart Association
 For Information: Mrs. Katherine I. Cox, Executive Director, Forsyth County Heart Association, 2046 Queen Street, Winston-Salem, 27103

Oct. 6-7

New Frontiers in Respiration
 Place: Downtown Holiday Inn, Raleigh
 Sponsored by: North Carolina Thoracic Society, North Carolina Tuberculosis & Respiratory Disease Association, North Carolina Academy of Family Physicians, Duke University Department of Postgraduate Medical Education
 Registration Fee: (Includes tuition, one luncheon, one dinner and social hour)
 Physicians \$30
 Paramedical Personnel \$20
 For Information: Samuel M. McMahon, M.D., Course

Director, North Carolina Thoracic Society, P. O. Box 127, Raleigh, N. C. 27602

Oct. 12-13

Annual Alumni Meeting, Distinguished Alumni Lectures, Scientific Session

Place: Babcock Auditorium, Bowman Gray School of Medicine, Winston-Salem

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem, 27103

Oct. 16-17

Joint Meeting of N. C. - S. C. Societies of Ophthalmology and Otolaryngology

Place: Blockade Runner Motor Hotel, Wrightsville Beach

For Information: Banks Anderson, Jr., M.D., N. C. Society of Ophthalmology and Otolaryngology, Duke University Medical Center, Durham, 27710

Oct. 25-27

Fourth Annual Radiology and Nuclear Medicine Postgraduate Course

Place: Duke University, Durham

Presented by: Department of Radiology at the Duke University Medical Center

For Information: Robert McLelland, M.D., Department of Radiology, Box 3808, Duke University Medical Center, Durham, 27710

October 26

Raleigh Academy of Medicine 24th Annual Clinical Symposium, "Clinical Pharmacology, Toxicology, and Drug Interaction"

Place: Sir Walter Hotel, Raleigh

For Information: B. B. Ferdon, M. D., Program Chairman, Raleigh Academy of Medicine, 119 N. Boylan Avenue, Raleigh, N. C. 27603

Nov. 17-18

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and The North Carolina Pediatric Society

Place: The Carolina, Pinehurst

For Information: Mrs. John McLain, 3209 Rugby Road, Durham, 27707

II. Coming Events in North Carolina

Dec. 8-9

Second Annual Reynolds Seminar in Medicine "Myocardial Infarction, 1972"

Place: Babcock Auditorium, Bowman Gray School of Medicine, Winston-Salem

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education Bowman Gray School of Medicine, Winston-Salem, 27103

Jan. 26-27, 1973

Third Annual Surgical Symposium "Surgical Emergencies"

Place: Babcock Auditorium, Bowman Gray School of Medicine, Winston-Salem

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem, 27103

III. Out of State (through December, 1972)

Aug. 16-18

Clinical Decision in Cardiology—3 days in Cardiology

Place: Holiday Inn, Myrtle Beach, S. C.

Sponsors: American Heart Association, Council on Clinical

Cardiology; Duke University Medical Center; N. C. Heart Association

Fee: \$60, Fellows & members; \$100, non-members of Council on Clinical Cardiology

For Information: American Heart Association, Council on Clinical Cardiology, 44 E. 23rd Street, New York, N.Y. 10010

Sept. 18-20

"Orthopaedic Nursing"

Sponsor: American Academy of Orthopaedic Surgeons Course

Place: Atlanta, Georgia

For Information: Joseph H. Dimon, III, M.D., 1938 Peachtree Road, N.W., Atlanta, Georgia 30309

Sept. 22

One day seminar—Latest Technics and Developments in Nuclear Medicine

Place: Self Memorial Hospital, Greenwood, S. C.

Sponsored by: South-East Chapter of the Society of Nuclear Medicine, Department of Radiology of Self Memorial Hospital, The South Carolina Regional Medical Program, and the Division of Continuing Education of the Medical University of South Carolina

Registration fee: \$15

For Information: Vince Moseley, M.D., Director, Division of Continuing Education, Medical University of South Carolina, 80 Barre Street, Charleston, South Carolina 29401

Sept. 25-29

Basic Mechanisms in Internal Medicine

Place: Medical College of Virginia, Div. of Health Sciences, Richmond, Va.

Tuition Fees: ACP Members and Fellows, \$80; Nonmembers, \$125; Associates, \$40; Other Residents and Research Fellows, \$80

For Information: Registrar, Postgraduate Courses, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104

Oct. 4

"Alcoholism in Medical Practice"

Place: Baruch Auditorium, Egyptian Building, Medical College of Virginia

Sponsored by: The Departments of Psychiatry and Family Practice in cooperation with the Department of Continuing Education, School of Medicine, Medical College of Virginia

For Information: Dr. James L. Mathis, Professor and Chairman, Department of Psychiatry, Box 907, Medical College of Virginia, Richmond, Virginia 23219

Oct. 12-14

"Surgery in Rheumatoid Arthritis"

Place: Atlanta, Georgia

Sponsor: American Academy of Orthopaedic Surgeons

For Information: F. James Funk, Jr., M.D., 1938 Peachtree Road, N.W., Atlanta, Georgia 30309

Oct. 16-17

Tennessee Valley Medical Assembly

Place: Read House, Chattanooga, Tennessee

For Information: Guy M. Francis, M.D., Chairman, 960 East Third Street, Chattanooga, Tennessee 37403

Oct. 16-18

"Neuromuscular Problems of Childhood"

Place: Charlottesville, Virginia

Sponsor: American Academy of Orthopaedic Surgeons

For Information: Warren G. Stamp, M.D. and Wilton H. Bunch, M.D., University of Virginia Hospital, Charlottesville, Va. 22901

Oct. 18

Symposium on The Management of Diabetes
Place: Baruch Auditorium, Egyptian Building, Medical College of Virginia

Sponsored by: Division of Endocrinology and Metabolism in cooperation with the Department of Continuing Education, School of Medicine, Medical College of Virginia
For Information: Dr. H. St. George Tucker, Professor and Chairman, Division of Endocrinology and Metabolism, Medical College of Virginia, Box 111, MCV, Richmond, Virginia 23219

Oct. 27-28

Tennessee Regional Meeting, American College of Physicians

Place: Sheraton Motor Inn, Memphis, Tennessee

For Information: Hall S. Tackett, M.D., 910 Madison Avenue, Memphis, Tennessee 38103

Nov. 4

Georgia Regional Meeting, American College of Physicians

Place: Grady Hospital, Atlanta, Georgia

For Information: Edwin C. Evans, M.D., 340 Boulevard, N.E., Atlanta, Georgia 30312

Nov. 30-Dec. 1

South-Wide Symposium on Human Nematode Intestinal Parasites

Place: Atlanta, Georgia

Sponsored by: University of South Carolina

For Information: James W. Follette, Project Assistant, Malnutrition and Parasite Project, 002 Maxcy College, University of South Carolina, Columbia, South Carolina 29208

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

The Duke Medical Center is adopting a computerized hospital information and administrative system designed to speed up some of the time-consuming processes involved with patient care.

Duke believes that the anticipated increase in efficiency and speed in handling what traditionally have been paperwork chores may result in a reduction in the average patient's hospital stay.

The system, called Burroughs-Medi-Data, is fully operational at Charlotte Memorial Hospital, which Burroughs said was the first hospital in the country to adopt such an extensive system. Burroughs said Duke will be the second.

Medi-Data is a data processing network designed to perform clinical paperwork and information gathering, communicating and reporting of activities in the area of patient care, administration and accounting, and research and statistics.

It will be used to speed up such time-consuming processes as spot inventory of available beds, keeping patient census, billing, filing insurance claim in-

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Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully coordinated with bacteriologic and clinical response. When the patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture media.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in pregnancy has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalyses with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria. Periarthritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarities to some diuretics, diuretics and oral hypoglycemic agents. Gout production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

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Gantrisin's rapid excretion rate is another reason why it is generally well tolerated. Over 50% of a single oral dose is excreted in 8 hours, over 90% in 24 to 48 hours, so there is little risk of hematuria or crystalluria, and anuria is rare.

As with all sulfonamides, adequate fluid intake must be maintained. Complete blood counts and urinalyses, with careful microscopic examination, should be performed frequently.

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formation, assembling statistics and routing physicians' orders and laboratory results.

Duke will be converting to the system over the next year.

* * *

A man with strong ties to Duke will direct the Graduate Program in Hospital Administration beginning this fall.

He is Dr. Boi Jon Jaeger, who received a B.S. at Duke in 1957, a master's in hospital administration in 1964, and a Ph.D. in political science at Duke in 1971.

Jaeger held several administrative positions in the hospital and medical center during the 1960's, leaving to join Tulane. He just completed a one-year National Health Services Research Fellowship in public policy at the University of Chicago.

* * *

Dr. C. Linwood Puckett, associate in surgery, is filling a newly established position of full-time surgeon-in-charge of the Duke emergency room. A native of Burlington, Puckett attended Elon College and earned his M.D. at Bowman Gray in 1966.

* * *

Dr. Thomas D. Kinney, director of medical and allied health education, has been named president of the Federation of American Societies for Experimental Biology (FASEB). The organization was formed in 1912 by six consultant societies with 12,500 members which make up the principal developers and dispensers of new knowledge in the field of biological disciplines in the United States, Canada, and 45 other countries.

* * *

Dr. Earl W. Brian, a native of Raleigh and a Duke medical graduate, has been named by California Governor Ronald Reagan as secretary of the state's Human Relations Agency. Formerly director of the state's Department of Health Care Services, Brian was the chief architect of Reagan's massive 1971 Medi-Cal reform program.

* * *

Three Duke faculty members are among the 52 new members elected to the Institute of Medicine of the National Academy of Sciences. They are Dr. Ewald W. Busse, chairman of psychiatry; Dr. E. Harvey Estes, chairman of community health sciences; and Dr. Daniel Tosteson, chairman of physiology and pharmacology.

* * *

The following School of Medicine faculty members have been promoted to full professor: Dr. Richard O. Burns, professor of microbiology; Dr. Richard S. Metzgar, professor of immunology; Dr. Suydam Osterhout, professor of microbiology; Dr. Eva J. Salber, professor of community health sciences; Dr. Donald Silver, professor of surgery; Dr. Edward Everett Anderson, professor of urology; Dr. John A. Goree, professor of radiology; Dr. Herman Grossman, professor of radiology.

Dr. Edward Huffman, associate in psychiatry and chief of the Occupational Psychiatry Section at Highland Hospital, and Dr. Demmie D. Mayfield, assistant chief in Psychiatry Service and associate professor of psychiatry, presented a symposium for T.V.A. on "Alcoholism in Industry" for industrial physicians and nurses in Huntsville, Ala.

* * *

Dr. Jay M. Arena, professor of pediatrics, has been appointed to the National Advisory Committee on Consumer Product Safety of the Food and Drug Administration. His term on the 16-member board will extend to April 30, 1974.

The committee advises the Commissioner of Food and Drugs on policy matters relating to the safety of consumer products, and reviews and recommends on applications for grants-in-aid for research and research training.

* * *

Dr. William G. Anlyan, vice president for health affairs, and Dr. Stuart M. Sessoms, hospital director, have been named to chair two committees within the Association of American Medical Colleges (AAMC).

Anlyan is chairman of the new Task Force on Cost of Graduate Medical Education and Faculty Practice Plans under the AAMC's Committee on Financing Medical Education.

Sessoms is chairman of a subcommittee on Regional Medical Programs-Comprehensive Health Planning under the AAMC's Health Services Advisory Committee.

* * *

Dr. James W. Wilson, associate professor of pathology, was the annual lecturer before the Detroit Physiological Society. He was inducted as an honorary member of the society and is only the fourth man to be so honored since the society's inception in 1937.

* * *

Dr. Athos Ottolenghi, associate professor of pharmacology, presented a paper on "Control of the Eosinophilic Leukocyte Population by Drugs," at the Fifth International Congress on Pharmacology held recently in San Francisco.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

Negotiations have been completed between the University of North Carolina here, four major rubber companies and the United Rubber Workers International Union which provide for a five-year nationwide occupational health study to be conducted by the UNC School of Public Health, it was announced recently.

Dr. Cecil G. Sheps, UNC vice chancellor for health sciences, called the agreement "a new and

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Under 40	\$ 51.50	\$128.50	\$179.50
40 - 49	78.00	189.00	240.50
50 - 59	114.00	260.50	312.00
60 - 64*	179.00	400.00	451.00

PLAN B—\$300 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 31.00	\$ 71.00	\$ 93.50
40 - 49	47.50	110.00	132.50
50 - 59	74.00	158.50	181.50
60 - 64*	112.50	251.00	273.50

PLAN C—\$500 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 19.50	\$ 43.00	\$ 57.00
40 - 49	32.00	74.00	88.00
50 - 59	51.50	114.00	127.50
60 - 64*	86.50	192.50	206.50
65 - 69	36.00	106.00	119.50

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35-39	38	76	114	152	190	35-39	15
40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
65-69	242	484	726	968	1,210	65-69	97

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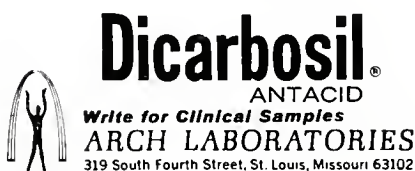
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most important departure for the relationships between science and industry in which our School of Public Health is playing a national leadership role."

Dr. Sheps went on to say, "It is significant that our School of Public Health has been selected for this major national pioneering project which undertakes a prospective study of possible hazards in the environment to which workers in the rubber tire industry are subject.

"A fundamental and unique characteristic of this long-term study is that it has been developed by an agreement between the tire companies and the union who have jointly decided to tackle this important assignment," he said.

The study will be conducted by UNC School of Public Health's Department of Environmental Sciences and Engineering headed by Dr. Daniel A. Okun and the Department of Epidemiology headed by Dr. John Cassel.

* * *

The United States' first self-instructional system designed specifically for students entering or planning to enter health sciences training has been developed at the University of North Carolina in Chapel Hill.

The program, coordinated by James Lea of the North Carolina Health Manpower Program, is for students whose education has not equipped them with many of the basic skills required for health professional training, particularly verbal and study skill.

According to Lea, the materials can be used anywhere—in a classroom or library, at home or in a public park.

The self-instructional set, entitled "Academic Skills Development Program" (ASDP), is divided into four units—health science terminology, use of the health science library, and development of seeing and thinking processes and methods for organizing ideas and information for oral or written presentation.

The content and skills taught cross disciplinary lines so the program can be of value to students inclined toward medicine, dentistry, nursing, public health, pharmacy or any allied health field, Lea said.

The ASDP materials are now available for use by schools and individual students throughout North Carolina from the N. C. Health Manpower Program office in Chapel Hill.

* * *

Research into the cause of hearing loss during the use of certain diuretics is under way at the University of North Carolina School of Medicine.

Dr. Jiri Prazma, chief investigator, explained that severe and temporary hearing loss has been reported over the past few years as a side effect of treatment by the new potent diuretics, ethacrynic acid and furosemide.

Dr. Prazma's research is aimed at identifying the causes of this increased hearing damage and finding possible ways to reduce its effect.

Working with him will be Dr. W. G. Thomas, Dr. Newton D. Fischer and Mack J. Preslar, all of the UNC Department of Surgery.

The research is funded by a \$31,273 grant from the National Institute of Neurological Diseases and Stroke of the National Institutes of Health.

* * *

Dr. William P. Glezen, a University of North Carolina pediatrician has been awarded a \$47,732 National Institutes of Health grant for research into two viruses which are the main causes of pneumonia in infants.

The study is aimed at clearing up some of the factors related to the development of diseases caused by respiratory syncytial virus and parainfluenza virus type 3.

So far, attempts to produce a vaccine against either of these viruses has proved unsuccessful, Dr. Glezen said.

One of the questions Dr. Glezen will be pursuing is whether antibodies to the viruses passed on by the mother participate in the disease process rather than provide protection.

* * *

Adetunji Okunyade of Fayetteville, a second year medical student at UNC, has been awarded a \$750 scholarship for research and clinical training in allergy by the Allergy Foundation of America.

The two-month scholarship was one of 21 awarded

this year to U.S. and Canadian students "who have demonstrated exceptional promise."

The awards are designed to encourage and assist medical students to obtain a broader understanding of allergic disease. The recipients are taught to apply knowledge acquired in the laboratory to treatment of individual patients in clinical experience.

Okunyade will be working under the supervision of Dr. William J. Yount, associate professor of medicine and bacteriology at the UNC School of Medicine. Their research will be concerned with "Characterization of Human Antibody with Blocking Activity in Mixed Lymphocyte Culture Assay (MLC)."

* * *

Plans to establish a state agency to oversee the medical aspects of sports in North Carolina high schools came under study August 3 in Greensboro.

Coaches and doctors from across the state met to discuss the feasibility and methods of establishing such an agency with legislators, representatives of the State Departments of Public Instruction, and nationally known authorities in sports medicine.

"The general goal of the conference was to improve the medical care of junior and senior high school athletes in North Carolina," said Dr. Frank Wilson who presided.

Dr. Wilson is chairman of the Medical Society's committee on the Medical Aspects of Sports and

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* * *

Joseph F. Patterson Jr., associate professor in the Anesthesiology Department accepted a two-month appointment on August 1 as a consultant in anesthesiology at the Plastic and Reconstructive Surgical Center of Children's Medical Relief International in Saigon, Vietnam.

* * *

Carl B. Lyle, Jr., associate professor in the Department of Medicine, has been recommended for a one-year leave to work with a group practice in Charlotte. He will help develop and improve older methods of medical care delivery.

* * *

Harold J. Fallon, professor of medicine, was granted a one-year leave from Aug. 21, 1972-Aug. 21, 1973 to do lipid research in the laboratory of Professor L.L.M. van Deenen, Biochemisch Laboratorium de Rijksuniversitat, Utrecht, the Netherlands.

* * *

Mack J. Preslar, research associate in the Department of Surgery, will be on leave through Jan. 31, 1973, to do further study, pursue research and development interests, and attend short courses.

* * *

Dr. C. D. Jenkins, professor of epidemiology, is leaving Aug. 31 to accept a position at the Boston University School of Medicine.

* * *

Dr. Stephen Zyzanski, associate professor of epidemiology, resigned July 31.

* * *

Television techniques have been relied on in the invention of an instrument capable of reducing x-ray radiation exposure by 90 percent. This invention reduced dangers of radiation 10 times over present x-ray methods.

The inventors are Francis B. de Friess, radiation safety officer for the University of North Carolina at Chapel Hill, and Terry F. Walser, an electronic technician in radiation therapy at North Carolina Memorial Hospital's Department of Radiology.

And their invention—a fluoroscope that limits radiation to a particular area—was presented July 31 before the Third International Congress on Medical Physics in Goteburg, Sweden.

Realizing the dangers of radiation exposure to technicians during the use of x-ray for medical diagnosis, the radiation specialists have spent the last year working on their fluoroscope model.

With the reduction of dose level to patients, the two-man team feels "the radiation scattered to the fluoroscopist and his technician approaches an insignificant amount."

"We can do fluoroscopy on dogs with a five to one reduction or greater," they have found. "We

expect to adapt this to human use at about ten to one reduction or greater."

After success in x-ray experiments with dogs, de Friess and Walser worked on a plan for adapting their instrument to the standard fluoroscope now used in medical clinics.

They have developed and tested an experimental fluoroscope which used a rotating cylindrical shutter—much like the operation of the television camera.

This new fluoroscope is capable of reducing radiation dosage during x-ray by a factor of approximately ten to one, or 90 percent. The reduction is possible due to breaking the x-ray beams into bands that sweep over the area being x-rayed.

With the use of the electron gun in a television-image system, it is possible to illuminate the area under observation by the gun rather than exposing the entire body area to the beams at one time.

By use of the camera shutter, the radiation beam is broken into lines that rotate over the image screen, isolating the area being studied. The potential reduction of dose to the patient is readily apparent, the radiation specialists note.

They investigated the possibility of patenting the idea. The search showed a similar idea was patented in 1958, but the former device was so large and cumbersome that it was clinically impractical, they reported.

Now de Friess and Walser have plans for developing a clinical model with additional capabilities—single frame x-ray using a memory system which can be referred to later, a video disc recorder for instant replay, information storage, subtraction studies, and spot film elimination.

* * *

Problem pregnancy counseling will be the topic of the first statewide workshop on the subject Sept. 29-30 at the University of North Carolina here. More than 350 counselors are expected to attend.

State, county and local social service and health agencies, religious groups, hospitals, colleges, and other organizations handling problem pregnancies are invited to send a representative to the N. C. Workshop on Problem Pregnancy Counseling.

The workshop is being sponsored by the UNC Human Sexuality Information and Counseling Service, N. C. State Board of Health, N. C. State Department of Social Services, Clergy Consultation Service, Carolina Population Center, Department of Obstetrics and Gynecology of the UNC Medical School, and Children's Home Society of North Carolina.

According to coordinator Robert Wilson of the Sexuality Counseling Service, the workshop will offer "up-to-date information and will focus on counseling methods which can best assist prospective parents in making the safest and wisest decision, whether it be keeping the child, placing the child for adoption, or obtaining an abortion."

Speakers will include Dr. Charles Butler of the Emory University School of Medicine; Dr. Arnold Case of the University of Connecticut; and Ernest Ratliff, attorney at the Institute of Government here and a specialist in health law.

A highlight of the workshop will be an informal "open house" with representatives of abortion clinics, adoption agencies, and maternity homes available to answer counselors' questions.

The cost of the two-day workshop is \$15. Registration forms are available by writing N. C. Workshop, Box 51, Carolina Union, University of North Carolina, Chapel Hill, N. C. 27514.

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE WAKE FOREST UNIVERSITY

Physicians and researchers seeking published material on any specific medical subject can obtain a pertinent bibliographic listing of titles and authors within minutes through a new system now in operation at the Bowman Gray School of Medicine.

The system, MEDLINE, connects the medical school library on-line with a computer in the National Library of Medicine, Bethesda, Md.

It improves upon other computer systems by which bibliographic information on medical literature is received in that it provides immediate response and enables the user to become an active participant in the search, modifying his request as information is received.

About 15 minutes is required for the average search. The cost to the user is only that of a long-distance telephone call to Bethesda, Md.

MEDLINE is not designed for simple searches on broad categories but is a valuable and efficient method of obtaining references on difficult or very specific problems.

* * *

Dr. C. Glenn Sawyer, professor of medicine at the Bowman Gray School of Medicine, has been re-elected to a position on the Audit Committee of the American Heart Association. His new term begins Dec. 1, 1972.

* * *

The Department of Surgery of the Bowman Gray School of Medicine and North Carolina Baptist Hospital moved during the first week in August to new facilities in the hospital's 16-story Z. Smith Reynolds Foundation Patient Tower.

The new surgical suite includes 17 operating rooms, a 17-bed recovery room and a surgical intensive care unit.

Innovative features include remotely controlled,

hydraulically operated operating tables and special facilities for outpatient surgery.

* * *

Twelve members of the Bowman Gray faculty recently were listed for the first time in "Who's Who in America." Included in the 37th edition of Who's Who listing were Dr. Richard L. Burt, professor of obstetrics and gynecology; Dr. C. Nash Herndon, professor of medical genetics and associate dean for research development; Dr. Thomas H. Irving, professor and chairman of the Department of Anesthesia; Dr. J. Maxwell Little, professor and chairman of the Department of Pharmacology; and Dr. I. Meschan, professor and chairman of the Department of Radiology.

Also, Dr. Robert P. Morehead, professor and chairman of the Department of Pathology; Dr. Richard T. Myers, professor and chairman of the Department

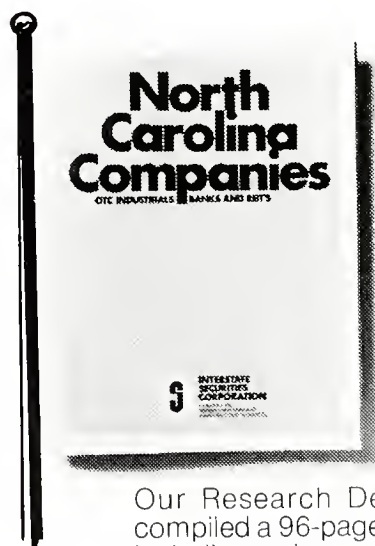
of Surgery; Dr. Quentin N. Myrvik, professor and chairman of the Department of Microbiology; Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry; Dr. Cornelius F. Strittmatter, professor and chairman of the Department of Biochemistry; Dr. Norman M. Sulkin, professor and chairman of the Department of Anatomy; and Dr. James F. Toole, professor and chairman of the Department of Neurology.

* * *

Dr. A. Robert Cordell, professor of surgery, recently was elected to active membership in the Society for Vascular Surgery. Active membership in the society is limited to 250 surgeons.

* * *

Dr. C. Douglas Maynard, associate professor of radiology and associate dean for student affairs, was elected president of the Educational Research Foun-



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NORTH CAROLINA

DAIRY COUNCILS

dation of the Society of Nuclear Medicine at the society's annual meeting in Boston, Mass.

* * *

H. Thomas Kimball and Gerald N. Hewitt have been promoted to key administrative positions at North Carolina Baptist Hospital. Kimball was appointed vice president for administrative services and Hewitt was named vice president for patient financial services.

Kimball, who joined the hospital's administrative staff in 1969, has served for the past year as director of the Financial Services Division. He holds the B.S. degree from High Point College and the M.B.A. degree from Louisiana State University.

Hewitt for the past year has been business office controller at the hospital. He joined the hospital staff in 1956 but resigned in 1960 to enter the ministry. He held pastorates at Baptist churches in King, Stanley and Welcome before returning to the hospital administrative staff as business manager in 1965.

He holds the B.A. degree from Wake Forest College and the B.D. degree from Southeastern Theological Seminary.

* * *

Mrs. Polly Story, chief radiologic technologist at North Carolina Baptist Hospital, has been elected president-elect of the American Society of Radiologic Technologists.

She was elected at the society's annual meeting in Denver, Colo. She has served as vice president and secretary-treasurer of the organization.

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

In the last issue of NCRMP *Newsnotes*, the new goals and objective statement was published with a note that there would be further amplification at a later date. Since this amplification proved to be fairly extensive, the complete and final statement is included here.

Promote and assist the development, efficient utilization, and optimum distribution of qualified health care personnel throughout the state, with special attention to underserved areas, both rural and urban.

1. Support, with and through the state and area-wide CHP agencies, systematic health manpower needs assessments, based on previously determined standards of care, so that priorities may be established in the areas of manpower development, utilization and distribution.

2. Enhance and support areawide cooperative efforts of educational institutions (e.g., technical institutes, community colleges, universities) and health

care providers as they seek to design and implement education and training opportunities for health care personnel.

National RMP guidelines constrain NCRMP from providing financial support for "basic education," i.e., education "designed principally to qualify one for a degree, diploma or board certification," except to the extent that such programs include "innovative training approaches and the development of new types of health personnel."

(The *NCRMP Statement of Area Health Education Systems* is available on request.)

3. Encourage and support the utilization of newly developed categories of manpower in organized systems of health care delivery.

The emphasis of this objective is not on a proliferation of health care personnel categories, but on the effective utilization of health care personnel within newly established classifications, such as neighborhood health workers, physician's assistants, family nurse practitioners, homekeepers, nurse midwives, and pediatric nurse associates.

Although as stated here, this objective deals with "newly developed categories of manpower," NCRMP also is interested in promoting more effective utilization of *all* health care personnel.

4. Promote distribution of health manpower in accordance with identified needs.

5. Promote and support the use of more effective educational methods and techniques in retraining or improving existing health care personnel.

6. Encourage and support an interdisciplinary team approach to the training and utilization of health care personnel.

NCRMP Staff members: Audrey Booth, R.N., M.S.N., and Ron W. Davis, Ed.D., Teer House, Tel. 919-477-0461.

Promote and assist the development and implementation of appropriate available and accessible Emergency Medical Services.

1. Promote and encourage the concept of Emergency Medical Services as an integrated system.

The EMS system is fragmented at local and state levels because of lack of (a) resources, (b) coordination, and (c) knowledge of the essential elements necessary for adequate emergency medical services. In order to improve the system, NCRMP will encourage activities which will result in a better understanding of the problems and a delineation of responsibilities for providing emergency services. Efforts should be initiated to develop an awareness at state and local levels of what needs to be done to provide good emergency medical care and how it relates to the total effort to improve the health care delivery system. Coordination of the efforts of the many state and federal agencies is an essential step in the fulfillment of this objective.

2. Stimulate and support local, regional and state-

wide groups to plan for Emergency Medical Services.

Adequate emergency service encompasses most of the common elements of communications, personnel, transportation, hospitals, public education, financing and organization. However, there are differences in the application of these elements due to the variety of local situations such as rural and urban settings, geography, political climate, economics and existing services. In order to recognize and deal with these differences, planning at all levels, especially the local level, is essential. Adequate planning should result in services designed to meet the needs of the individual community and at the same time should relate to other communities and regionalized efforts. Existing state and areawide health planning agencies should be utilized. This mechanism assures representation of all affected segments of the community in the decision-making process.

3. Implement demonstrations of regional or sub-regional comprehensive Emergency Medical Service systems.

Because of limited funds, NCRMP cannot support ongoing, total, or even major elements of comprehensive Emergency Medical Services, but will support innovative approaches which will improve or expand emergency services, particularly to the poor and to rural areas.

4. Encourage and support educational efforts for professional and allied health personnel in order to

improve their abilities to provide Emergency Health Services.

These efforts should be consistent with other manpower goals and objectives of NCRMP, including the development of area education systems. These efforts should also be coordinated with other agencies and organizations with similar objectives. NCRMP will concentrate on activities where the need is greatest.

NCRMP Resource Staff Members: William W. Lowrance and John H. Young III, M.P.H., Teer House; Tel. 919-477-0461.

Promote and assist providers and consumers to develop techniques and innovative delivery patterns for improving the accessibility, efficiency, and effectiveness of personal health care for areas of need throughout the state.

1. Stimulate and support activities which will promote investigation and implementation of innovative patterns in organizing health care delivery systems.

Some types of activities which NCRMP would encourage are: (a) those related to increasing the understanding of deliverers and consumers concerning prepaid group practice, (b) those which expand the role of the larger hospitals in the delivery of health care in relating both to a medical school and to smaller hospitals within their usual patient referral

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Card McGraw, Ph.D.
David F. Strahley, Ph.D.

Don Phillips, Administrator
R. Lindsay Shuff, M.H.A.
Asst. Administrator

AFFILIATED CLINICS

Bluefield Mental Health Center
525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
Leslie J. Borbely, M.D.

Mental Health Clinic
Professional Building, Wise, Va.
Pierce D. Nelson, M.D.

area, (c) demonstration projects to help develop increased services, especially to the poor and rural, including the extension, availability, and accessibility of ambulatory care and other resources so that these increased services become more convenient to the people to be served, and (d) public and patient education regarding the most effective use of available health resources and services and improved and more efficient utilization of existing patterns in health care delivery to maximize the system's effectiveness.

As stated above, this objective deals with "innovative patterns in organizing health care delivery systems," which would include activities to develop methods to improve, augment, and coordinate existing patterns in the delivery of health care to produce more efficient utilization and maximize the effectiveness of the system.

2. Provide special consultation and feasibility study assistance to local medical societies, interested groups of physicians and other health care providers and consumers to plan for the organization, financing, and implementation of new kinds of health care delivery systems.

NCRMP cannot fund the operational activities of such delivery systems, but will support activities related to increasing support for new and experimental models of health care in the period before the submission of formal organizational requests to other organizations.

NCRMP Resource Staff Members: Robert N. Headley, M.D., Bowman Gray School of Medicine, Tel. 919-727-4331; and John H. Young, III, M.P.H., Teer House, Tel. 919-477-0461.

Promote and assist the development and implementation of mechanisms to improve the quality and standards of personal health care services.

1. Promote and encourage concepts which will improve the quality of personal health care services.

Some of the types of activities which NCRMP will encourage are: studies and pilot demonstrations of peer review and problem-oriented record systems, studies of effective patient care, surveys of hospital utilization, and quality of patient care studies. NCRMP will also encourage studies of prepaid medical care, preventive care, continuity of care, and rehabilitation, as these relate to improving the quality of personal health care services.

2. Assist health care professions to develop standards of performance, within their own group and other collaborating groups, as related to clinical services (e.g., obstetrics and gynecology, pediatrics) and disease categories.

3. Assist professional societies and associations to implement quality assessment mechanisms such as peer review, interdisciplinary team review, self-evaluation, clinical unit, utilization review, and similar activities.

NCRMP Resource Staff Members: Robert B.

Lindsay, M.D., and Manly Fishel, M.P.H., Teer House, Tel. 919-477-1461.

(No priority ranking is intended by the order in which these goals are presented.)

* * *

The North Carolina Regional Medical Program is providing \$1,225 to the North Carolina Medical Society for the support of a conference on access to medical care. The conference will be held Sept. 9 and 10 at the Quail Roose Conference Center.

* * *

NCRMP is also providing \$3,000 to the Mecklenburg County Medical Society to reimburse certain members for travel costs to visit the San Joaquin Foundation for Medical Care in Stockton, Calif., and to attend a meeting of the American Association of Foundations for Medical Care in Sea Island, Ga. The California trip and the meeting are part of the Mecklenburg society's active study of the feasibility of establishing a foundation for medical care.

* * *

The North Carolina Regional Medical Program announces the completion of the second printing of the second edition of *Diet and Kidney Disease: A Guide in Dietary Management* by Alice Heimbach, R.D., M.P.H., consulting dietitian, and Barbara F. Hughes, R.D., M.S., M.P.H., consulting dietitian, North Carolina State Board of Health. The second printing of the 28-page booklet contains no major revisions or additions, though it does incorporate some corrections.

The booklet contains a summary of dietary adjustments in kidney disease, meal patterns for 20- and 40-gm. protein diets, with and without sodium and potassium restriction, and directions for varying protein and sodium levels. Also included are lists of food groups according to protein, sodium, and potassium contents. Meal patterns list possible food substitutions and/or alternate meals. Household measurements are used for all meal patterns to facilitate use by small hospitals, nursing homes, or persons in the home.

Limited copies of the booklet are available from the North Carolina Regional Medical Program, P. O. Box 8248, Durham, N. C. 27704.

Attention: Coordinator, Health Professional Development

Dr. James E. D. Gardam of 20 Summit Street, Glen Ridge, N. J., has been appointed medical director of the Governmental Health Programs Department of the Prudential Insurance Company of America, effective Aug. 1, 1972.

Dr. Gardam will be responsible for the medical affairs for the department in its three locations: Millville, N. J.; High Point, N. C.; and Atlanta, Ga.

Dr. Gardam is a member of the American Society of Internal Medicine and has been practicing with the

North Essex Medical Associates in Glen Ridge. He is a graduate of Wesleyan University and received his medical degree from Yale University in 1945. He is a Navy veteran and served in several capacities including that of Senior Medical Officer and Flight Surgeon at Pearl Harbor in 1953.

SKIN CANCER DETECTION CLINIC

The National Program for Dermatology in cooperation with the North Carolina State Board of Health and the American Cancer Society is sponsoring a Skin Cancer Detection Clinic at the next North Carolina State Fair, Oct. 13 through 21. This project has been approved by the Dermatology Section and the Public Relations Committee of the N. C. Medical Society. All interested physicians are invited to stop by and see the project.

COMMITTEE ON BLUE SHIELD

As required under the Constitution and Bylaws of the North Carolina Medical Society, Chapter X, Section 16, the Committee on Blue Shield "shall announce and hold each year at least four open meetings at which any member of the Society may present items for consideration by the Committee."

Accordingly, at its meeting on July 27, 1972, the Committee scheduled the following meetings:

Thursday, September 28, 1972, 6:30 p.m., Mid Pines Club, Southern Pines, N. C.

Thursday, November 30, 1972

Thursday, January 25, 1973

Thursday, March 22, 1973

Society members should contact William R. Hudson, M.D., Chairman, in advance if they wish to discuss any topics with the Committee, and the Chairman will advise them as to the time and location of the next meeting.

Announcement to Society Members

Society members who want a copy of the printed Transactions of the 118th Annual Session of the North Carolina Medical Society held in Pinehurst, May 20-24, 1972, should notify the Medical Society Office, P. O. Box 27167, Raleigh, North Carolina 27611.

A return post card for use in requesting a copy will be enclosed with the October issue of the "Public Relations Bulletin." In addition a "cut-out" request form appears near the back of this issue of the Journal should you not have the request card handy.

The Transactions will be printed and ready for distribution by early fall. A copy will automatically be sent to each County Society Delegate, President and Secretary, and to State Society officers.

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Month in Washington

The Democratic National Convention shouted approval of "a system of universal national health insurance" financed by federal funds and administered by the federal government.

The platform plank adopted by the convention at Miami Beach declares that a national health plan should cover all Americans "with a comprehensive set of benefits including preventive medicine, mental and emotional disorders, and complete protection against catastrophic costs, and in which the rule of free choice for both provider and consumer is protected. The program should be federally financed and federally administered."

There was little debate on the plank and little attention paid to it at the hectic convention where most interest was focused on the abortive stop-McGovern fight and on foreign affairs, taxes, welfare, and other domestic concerns of the party platform that split the delegates.

Conspicuously missing from the health plank were any detailed recommendations on how the national health insurance program should be funded, how the government would operate it, or the cost, leaving Democratic presidential candidate George McGovern free to come up with his own program if he desires.

Senator McGovern's stand on health is not clear at this time. The candidate did not stress health or any specific health legislation in his preconvention bids for popular votes. However, he is expected shortly to set down his ideas on a national health program, a plan that likely will incorporate much of the Kennedy-Griffiths philosophy.

In this unusual election year which has turned the Democrats inside out, the McGovern brain trust might decide to promote health once the campaign gets going. It could be one of the battleground issues. Right now, though the Nixon administration appears to have "de-fused" health by forcing the debate on the question of degree, not on whether there should be a national health program. Furthermore, Administration spokesmen can point to the fact that the democratically-controlled congress did not act on the Administration's health program or any other for two years.

* * *

The HEW Department has said hospitals funded under the Hill-Burton Act will be reviewed on a case-to-case basis to determine whether a "reason-

able volume" of free care is furnished to persons unable to pay.

This interim regulation will enable hospitals already providing a large amount of free care to submit a financial report to that effect and be automatically in compliance. It also provides "presumptive compliance" levels of free care, lower than first recommended in April, which can be met in any one of three ways an institution chooses. In addition it sets guidelines for individualized determination for hospitals which are unable to meet the "presumptive compliance" levels.

In general, the new policy met objections of the American Hospital Association that the original proposals could put many hospitals out of business.

HEW Secretary Elliot Richardson said the regulation, modified as recommended to him by the Federal Hospital Council, is being issued now in interim form so that some regulation be immediately in effect in view of pending court cases seeking to compel him to act promptly.

Vernon E. Wilson, M.D., administrator of the Health Services and Mental Health Administration, which directs the Hill-Burton program, said:

"Much misunderstanding arose over the earlier version of this interim regulation published for comment back in April. Many people felt that the 'presumptive compliance' guidelines constituted standards to which hospitals would be held. It is important to understand that any institution which falls below the 'presumptive compliance' guidelines will have an individualized determination of what constitutes a reasonable volume of free care."

* * *

The National Institutes of Health has announced it will conduct major study of acupuncture, the ancient Chinese medical practice of curing illness and relieving pain by piercing the skin with needles.

Howard P. Jenerick, special assistant to the Director of the National Institute of General Medical Sciences, said the study would involve use of acupuncture as an anesthetic and alleviation of pain from neuralgia, nerve injuries, and cancer.

He predicted the study, to cost "hundreds of thousands" of dollars, would lead to acupuncture treatment of American patients within a year.

The announcement was made in a statement by Dr. Robert Q. Marston, NIH Director, who said the investigation was recommended by a committee of

experts in anesthesiology, neurology, neurophysiology, and psychology who met July 17-18 at NIH. Committee chairman was Dr. John J. Donican, an authority on pain at the University of Washington's School of Medicine in Seattle.

"After considering the many suggested uses of acupuncture, the Committee recommended that the most valuable first approach in the United States would be studies on the method's use for surgical anesthesia and for the alleviation of certain chronic pain syndromes," Marston said.

* * *

An election year battle between a Democratic congress and President Nixon is in prospect over bill appropriating funds for federal health programs. Nixon feels budget busting HEW money bill which soared \$2 billion above what he recommended and other pending appropriations measures will send the federal budget for this fiscal year out of sight. White House aides say congress already has topped the budget by more than \$6 billion.

Nixon is considering either a special message to congress, or a national television address, or both, outlining the perils of higher federal outlays. The maneuvering for political advantage that will mark the remainder of this session of congress promises the fascination and intricacies of a championship chess match. Nixon is prepared to pound home the theme that fat federal budgets lead to inflation and higher

federal taxes. Democrats are geared to holler that the Administration wants to chop vital and popular federal programs.

* * *

The fate of the physicians' draft next year rests with congress and the extra pay bill for military physicians — a measure now before the House Armed Services Committee.

Assistant Secretary of Defense for Health and Environment, Richard Wilbur, M.D., who helped fashion the new program, is keeping his fingers crossed that the lawmakers will okay the bill this session. Without it, he says, the draft undoubtedly will have to be extended for young physicians.

Little controversy has cropped up over the legislation, and barring some unexpected obstacle, it stands an excellent chance of whisking through congress before adjournment this year.

Designed to "facilitate the establishment of an all voluntary army and to maintain sufficient numbers of career officers in critical areas," the pay bill authorizes yearly bonuses of up to \$17,000 for qualified physicians "in addition to any other pay or allowances to which he was entitled."

This would be in addition to the \$100 a month extra pay for the first two years of service and \$350 a month thereafter.

* * *

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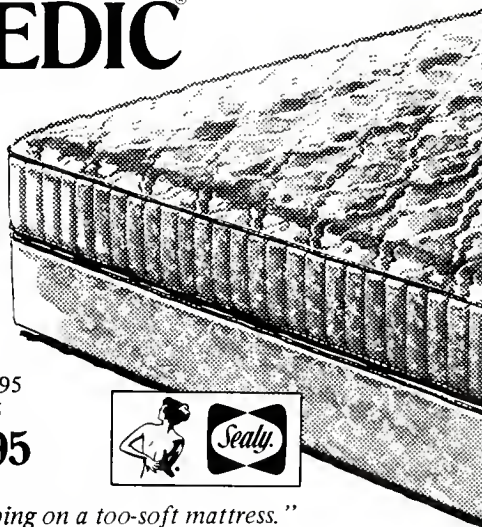
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"Sleeping on a Sealy is like sleeping on a cloud"

market has spurred the federal government to inaugurate a program of training state and local police and prosecutors in the intricacies of running down the malefactors.

A pilot program is being started for Texas, Michigan and Mississippi, which will receive \$333,000 to finance the training which will be conducted in Washington, D. C.

An official of the Bureau of Narcotics and Dangerous Drugs has said that despite the existence of federal legislation in the field and the enactment by 35 states of model state controlled substances acts,

the illegal diversion of drugs remain a major problem.

The BNDD exercises its supervision at the level of the manufacturer and distributor; the states are responsible for policing at the retail level—retail and hospital pharmacies, and physicians' offices.

According to a BNDD official, many local police are not equipped or trained to carry out the type of detective work required to ferret out people selling legitimate drugs on the black market. In addition, he noted, prosecutors are not familiar with this area and unsure of how to handle the cases that are brought.

Book Reviews

The Principles and Practice of Medicine. Ed.18. By A. M. Harvey, R. J. Johns, A. H. Owens, Jr., and R. S. Ross. 1,650 pages. Price, \$24.50. New York: Appleton-Century-Crofts, 1972.

The real story of mankind has been said to be history without wars. If this is true, the examination of the medical literature of the period should help us to gain some idea of particular societies. It is presumptuous to compare the Edwin Smith papyrus to the latest pharmaceutical house throwaway, but the confirmed people-watcher can find many clues and invitations to broader speculations. If the physician of today is a successor of the shaman, witch doctor or priest of earlier eras, comparison of medical texts through their many editions might provide surprising information about man and his society, relationships not always considered preeminently medical. In my office are copies of the seventh and eight editions of Osler's *The Principles and Practice of Medicine*, the seventh the last thoroughly revised by Osler alone. Many pages in these volumes are devoted to clinical descriptions, particularly of typhoid fever, syphilis and tuberculosis. The clinical descriptions confirm that our medical predecessors may have had better eyes for their patients and a more felicitous way with words. The description of purulent pericarditis, for example, is very well done and the section on typhoid fever is a classical monograph in itself.

The eighteenth edition of *The Principles and Practice of Medicine*, a venture of the Department of Medicine at Johns Hopkins, reflects many differences between 1972 and Osler's herculean effort in 1910. Sir William began his work with a description of diseases due to animal parasites, whereas the eighteenth edition first approaches the patient and then

proceeds through well written and superbly diagrammed discussions of water and electrolyte metabolism and renal diseases and disturbances. Further comparison of the contents of the two volumes simply serves to emphasize the tremendous explosion of medical knowledge, at the same time confirming the validity of the bedside observations so superbly presented by Osler. It is when the therapies of the eras are compared that differences become most glaring; yet without the therapeutic nihilism of Osler and his contemporaries, the questions answered in modern texts could not have been posed. One can compare material in the older texts concerning the prevalence of major diseases then and now, the major industrial medical problems, the pages devoted to each system and the deletions and additions and write a learned monograph complete with occult references which might satisfy the most erudite of modern sociologists. Even the omissions in the eighteenth edition are interesting, for chlorosis has nine references in the index of the older volume and none in today's work. Dietl's crisis requires two paragraphs in the seventh edition and was referred to in other medical texts as recently as 1949. Status thymolympathicus is referred to by Osler but in a rather skeptical tone and it has since passed from view but not before many supposed victims underwent thymic radiation in early childhood, thus proving the point that a theoretical condition can be treated more easily than one which nature reproduces predictably.

Perhaps the new Hopkins text should not be compared to its direct ancestors but rather to its modern cousins, because it does deviate somewhat from the traditional encyclopedic approach pioneered by Osler. Recognizing that our knowledge of process has

S. B. Blackley, Jr. spent his last vacation in the Blue Ridge Mountains. Searching for a downed plane.

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When a pilot fails to report to the airport his time of arrival, and the plane is overdue, that's when S. B. goes into action. Sometimes he gets calls at three o'clock in the morning to go look for an overdue plane.

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increased greatly in recent years, Dr. Harvey and his colleagues have presented a functional text which allows the medical student of all ages to work logically from the disordered process to its cause whereas the more encyclopedic text expects diagnosis first. That the nature of the host dictates the manifestations of disease is well recognized and repeatedly emphasized in many small ways. Still it is difficult to give up the old and struggle with the dynamic continuity of nature. Those of us some 25 years out of medical school have had to give up the frog gastrocnemius preparation, the Gaskell clamp, smoked kymograph paper, the worries about what Boas-Oppler bacilli really mean, and the many protuberances of osteology. If such losses have proved painful, a tour through the eighteenth edition should be therapeutic as well as broadening, because just as Osler's texts in his day stood alone so does the modern version have no peers. It would be superfluous to say that the book is highly recommended for anyone in medicine beginning with the greenest freshman entering school in the fall of 1972.

JOHN H. FELTS, M.D.

Review of Medical Microbiology. By Ernest Jawetz, Joseph L. Melnick and Edward A. Adelberg. Edition 10. 518 pages. Price, \$8.00. Los Altos, California: Lange Medical Publications, 1972.

The recent edition of this well known review text is a concise and comprehensive manual. With the biennial publication of a new edition, the authors are able to update the material and allow the student of medical microbiology to keep abreast of current information.

As in past editions, the authors cover the entire gamut of microbiology including chapters on basic bacteriology, immunology, mycology, virology, and parasitology. The chapters on mycology and parasitology are shallow, but perhaps reflect the lack of emphasis on these areas in more detailed texts of microbiology.

Presently, research in microbiology is concerned to a large extent with fundamental principles of virology, immunology, and microbial metabolism. Therefore, it is appropriate that these topics have

been revised and expanded to some extent in this new edition. Brief descriptions of the newer antibiotics and their modes of action have also been included.

Unfortunately, the chapter dealing with diagnostic medical microbiology is superficial and lacks a comprehensive bibliography to which a student might refer. Since this manual is used so extensively by, and soon becomes the accepted text of, medical students, more emphasis should be given to the diagnostic aspects of medical microbiology, so that when these students begin their clinical training, they will be better informed on the use of laboratory methods for the accurate and rapid diagnosis of infectious diseases.

Overall the manual is well written and would serve as a useful adjunct to a more comprehensive text, especially for students preparing themselves for national board examinations.

—BENEDICT L. WASHLAUSKAS, Ph.D.

Living With Myasthenia Gravis: A Bright New Tomorrow. By Jean Welch Kempton. 90 pages. Price, \$6.95 Springfield, Ill.: Charles C Thomas, Publisher, 1972.

This is a 90-page, highly personal account of the author's 40 years of adjustment to an illness which was so severe at the outset that she overheard her family discussing funeral arrangements. She was apparently the first patient to receive injectable Prostigmin, and she describes how her three-month-old flaccidity completely disappeared within 12 minutes. This introduction is the most interesting part of the book. There are 10 chapters devoted to descriptions of the three staple medications, the subtlety of the symptoms, and step-by-step accounts of experiences with occupational therapy and household tasks, and case histories of her myasthenic friends. There is an interesting historical appendix and a summary of common symptoms. There is also an annotated bibliography which seems somewhat irrelevant, listing hobby manuals, guides to retirement, and how to live with your teenager. The book should be especially valuable for the patient with newly discovered myasthenia.

No more attendants should be admitted [at childbirth] than are absolutely necessary; and it is to be wished that those would never converse about labours that have been accompanied with greater danger. Such conversation seldom fails to make the patient extremely unhappy, and consequently impedes the labor. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 363.

In Memoriam

Emil Bogomir Cekada, Ph.D., M.D.

Dr. Emil Bogomir Cekada, age 68, died at Watts Hospital, Durham, North Carolina, July 18, 1972. He was a native of Jelshane, Austria. Dr. Cekada obtained his B.S. degree in 1923 at the University of Washington at Seattle. In 1926 he received his doctors degree in social science at Johns Hopkins Hospital and was awarded the M.D. degree from this institution in 1929.

Dr. Cekada interned at Johns Hopkins Hospital. Later he became resident physician in the Medical Diagnostic Clinic, Duke Hospital. He was resident at Watts Hospital from 1933-1934. From 1934 to 1942 Dr. Cekada practiced internal medicine in Durham. He volunteered for service in World War II in June, 1942, as a major in the Medical Corps. He

was later promoted to lieutenant colonel and served in the Pacific theater until 1946. Following his discharge from the Army he resumed his medical practice in Durham. In 1957 he joined the staff of the Veterans Administration Hospital. He retired in 1968. Following this he served as personnel physician at Watts Hospital and in the Department of Community Health Sciences at Duke University.

Dr. Cekada was certified by the American Board of Internal Medicine. He was a member of the New York Academy of Sciences, the American Medical Association, the Southern Medical Association, the Military Surgeons of the United States, and the Durham-Orange County Medical Society. He was president of this society in 1949-1950. He was also a member of the Durham Elks Club.

Man comes into the world more helpless than any other animal, and stands much longer in need of the protection and care of his parents; but this care is not always bestowed upon him; and when it is, he often suffers as much from improper management as he would have done from neglect. The officious care of parents, nurses, and midwives, becomes one of the most fruitful sources of the disorders of infants. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p 369.*

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES
AND SELECTED CITIES OF RESIDENCE,
WITH RATES PER 1,000 DELIVERIES - NORTH CAROLINA,
JUNE 1972 AND MOST RECENT 12-MONTH TOTALS

.....WHITE.....								NONWHITE.....												
COUNTY	PERINATAL DEATHS		TOTAL DELVY		PERI-NATAL RATE PER 1,000 DELVY		COUNTY	PERINATAL DEATHS		TOTAL DELVY		PERI-NATAL RATE PER 1,000 DELVY		COUNTY	PERINATAL DEATHS		TOTAL DELVY		PERI-NATAL RATE PER 1,000 DELVY	
	JUN 1972	JUL 1971-JUN 1972	JUN 1972	JUL 1971-JUN 1972	JUN 1972	JUL 1971-JUN 1972		JUN 1972	JUL 1971-JUN 1972	JUN 1972	JUL 1971-JUN 1972	JUN 1972	JUL 1971-JUN 1972		JUN 1972	JUL 1971-JUN 1972	JUN 1972	JUL 1971-JUN 1972	JUN 1972	JUL 1971-JUN 1972
	1972	1972	1972	1972	1972	1972		1972	1972	1972	1972	1972	1972		1972	1972	1972	1972	1972	1972
NORTH CAROLINA	120	1752	65696	26.7	93	1201	28598	42.0												
ALAMANCE	4	33	1231	26.8		20	433	46.2	JOHNSTON	4	29	791	36.7	3	16	291	55.0			
ALEXANDER		11	341	32.3		1	42	-	JONES	1	1	79	-		1	78	-			
ALLEGHANY	1	5	133	37.6			6	-	LEE	1	11	410	26.8		13	171	76.0			
ANSON		6	191	31.4	1	14	287	48.8	LENOIR		18	561	32.1		19	444	42.8			
ASHE	3	14	296	47.3			4	-	LINGOLN	2	15	518	29.0		4	116	-			
AVERY		9	211	42.7			1	-	MCDOWELL		13	540	24.1		1	40	-			
BEAUFORT		8	378	21.2	2	8	252	31.7	MACON		4	233	-		9	-				
BERTIE		4	112	-	1	8	240	33.3	MADISON		14	254	55.1		2	-				
BLADEN		5	245	20.4	3	11	232	47.4	MARTIN	1	6	195	30.8	2	17	268	63.4			
BRUNSWICK		3	361	-	1	11	170	64.7	MECKLENBURG	7	85	4244	20.0	4	89	2322	38.3			
BUNCOMBE	8	67	1933	34.7	1	16	256	62.5	MITCHELL	1	3	189	-		1	-				
BURKE	2	22	1013	21.7		6	90	-	MONTGOMERY		5	237	21.1		3	117	-			
CABARRUS		23	953	24.1	1	11	298	36.9	MOORE	1	15	460	32.6	2	16	228	70.2			
CALDWELL	4	30	1035	29.0	1	3	80	-	NASH		12	564	21.3		11	495	22.2			
CAMDEN		1	53	-			46	-	NEW HANOVER	2	30	1194	25.1	3	17	450	37.8			
CARTERET	1	10	525	19.0		1	88	-	NORTHAMPTON	1	4	104	-	1	17	295	57.6			
CASWELL		10	170	58.8	1	9	175	51.4	UNSLW	5	67	2203	30.4	1	5	413	12.1			
CATAWBA	3	50	1433	37.1	1	9	248	36.3	ORANGE		18	735	24.5		16	229	69.9			
CHATHAM	1	10	315	31.7		3	151	-	PAMLICQ		1	93	-		3	60	-			
CHESTER	1	5	262	19.1			14	-	PASQUOTANK		5	272	18.4	1	5	165	30.3			
CHOWAN		3	84	-		3	93	-	PENDER		3	172	-		3	157	-			
CLAY	1	2	112	-			1	-	PERQUIMANS		1	56	-		51	-				
CLEVELAND	2	36	975	36.9	5	22	407	54.1	PERSON		7	286	24.5		4	220	-			
COLUMBUS	2	26	527	49.3	3	18	366	49.2	PITT		19	640	29.7	3	26	631	41.2			
CRAVEN	2	28	1139	23.5	2	17	415	41.0	PODK	1	4	146	-		25	-				
CUMBERLAND	6	67	3626	22.7	2	57	1632	34.9	RANDOLPH	1	33	1194	27.6		4	118	-			
CURRITUCK	1	3	80	-			46	-	RICHMOND		15	456	32.9		11	244	45.1			
DARE		2	97	-			10	-	ROBESON	2	14	626	22.4	4	61	1725	35.4			
DAVISON	1	48	1502	32.0		12	253	47.4	ROCKINGHAM	1	31	1014	30.6	1	28	400	70.0			
DAVIE	1	10	278	36.0		3	55	-	ROWAN	1	20	1107	18.1	1	10	316	31.6			
DUPLIN		8	376	21.3		13	317	41.0	RUTHERFORD	2	19	672	28.3	1	7	169	41.4			
DUFHAM		34	1274	26.7	1	34	888	38.3	SAMPSON		8	416	19.2		12	339	35.4			
EDGEcombe	1	6	332	15.3		20	493	40.6	SCOTLAND	1	14	313	44.7		13	320	40.6			
FURSYTH	3	48	2454	19.6	9	42	1132	57.1	STANLY		18	611	23.5		7	126	55.6			
FRANKLIN		3	162	-		13	240	54.2	STOKES	2	12	410	29.3		2	62	-			
GASTON	3	55	2586	21.3	1	20	503	39.8	SURRY		26	858	29.0		3	59	-			
GATES	1	3	56	-		7	97	-	SWAIN		2	115	-		1	69	-			
GRAHAM		2	132	-			7	-	TRANSYLVANIA		11	270	40.7		1	22	-			
GRANVILLE		11	215	51.2	1	14	299	46.8	TYRRELL		1	18	-		3	34	-			
GREENE	1	6	32	-		6	126	47.6	UNION		18	782	23.0	3	22	326	67.5			
GUILFORD	6	83	3330	24.9	10	73	1586	46.0	VANCE		8	345	23.1		17	346	49.1			
HALIFAX	3	15	386	38.9	4	25	601	41.6	WAKE	6	67	2833	23.6	4	40	1126	35.5			
HARNETT		13	647	20.1	1	19	310	61.3	WARREN			70	-		1	11	182	60.4		
HAYWOOD	1	15	622	24.1			12	-	WASHINGTON		1	122	-	1	15	124	121.0			
HENDERSON		23	697	33.0	1	2	37	-	WATAUGA		10	352	28.4		1	7	-			
HERTFORD		2	132	-		15	259	57.9	WAYNE	5	42	1173	35.8	1	25	599	41.7			
HUKE		2	119	-	1	10	229	43.7	WILKES		28	846	33.1		2	50	-			
HYDE		2	39	-	2	5	53	-	WILSON	3	11	520	21.2		19	542	35.1			
IREDELL	5	23	910	25.3		15	340	44.1	YADKIN		10	373	26.5		2	28	-			
JACKSON	1	9	272	33.1		2	62	-	YANCEY		4	194	-		3	-	-			
CITIES CITY TOTALS ARE ALSO INCLUDED IN COUNTY TOTALS																				
ALBEMARLE		1	140	-		2	40	-	LENOIR		6	197	30.5	1	1	42	-			
ASHEBORO		1	213	-			26	-	LEXINGTON		11	236	46.6		4	90	-			
ASHEVILLE	2	21	599	35.1	1	15	225	66.7	LUMBERTON	1	3	196	-	1	10	205	48.6			
BURLINGTON	3	17	465	36.6		5	153	32.7	MONROE		2	123	-	1	10	106	94.3			
CHAPEL HILL		5	262	19.1		1	59	-	MORGANTON		5	124	40.3		1	27	-			
CHARLOTTE	5	53	2568	20.6	4	82	2009	40.8	NEW BERN		2	160	-	1	6	158	38.0			
CONCORD		7	168	41.7	1	6	111	54.1	RALEIGH	2	32	1278	25.0		27	609	44.3			
DURHAM		18	754	23.9	1	28	777	36.0	REDSVILLE		6	151	39.7	1	8	95	-			
		8	188	42.6		4	58	-	ROANOKE RAPIDS	2	6	188	31.9		3	39	-			
ELIZABETH CITY		3	123	-	1	3	81	-	ROCKY MOUNT E.		1	94	-		7	130	53.8			
FAYETTEVILLE		25	991	25.2	1	34	617	55.1	ROCKY MOUNT N.	5	217	23.0		6	112	53.6				
GASTONIA	2	22	736	31.2	1	8	252	31.7	ROCKY MOUNT C.	6	311	19.3		13	242	53.7				
GOLDSBORO	2	10	291	34.4	1	13	244	53.3	SALISBURY	4	164	-	1	7	144	48.6				
GREENSBORO	1	35	1593	21.9	6	44	1000	44.0	SANFORD	4	136	-		5	76	-				
GREENVILLE		7	248	28.2		5	187	26.7	SHELBY	7	157	49.6		3	108	-				
HENDERSON		4	170	-		5	141	35.5	STATESVILLE		5	157	25.4		6	164	36.6			
HICKORY	1	14	268	48.6		5	120	41.7	THOMASVILLE		6	208	28.8		7	94	-			
HIGH POINT	3	23	738	31.2	4	22	431	51.0	WILMINGTON	1	14	515	27.2	2	14	390	35.9			
JACKSONVILLE	3	17	368	48.2		2	76	-	WILSON	1	3	259	-		8	248	32.3			
KINSTON	9	247	36.4	-		11	231	47.6	WINSTON SALEM	1	24	1137	21.1	9	42	1073	39.1			

CITIES

CITY TOTALS ARE ALSO INCLUDED IN COUNTY TOTALS

ALBEMARLE	1	140	-	2	40	-	LENDIR	6	197	30.5	1	1	42	-			
ASHEBORO	1	213	-		26	-	LEXINGTON	11	236	46.6		4	90	-			
ASHEVILLE	2	21	599	35.1	1	15	225	66.7	LUMBERTON	1	3	196	-	1	10	205	48.6
BURLINGTON	3	17	465	36.6		5	153	32.7	MONROE		2	123	-	1	10	106	94.3
CHAPEL HILL		5	262	19.1		1	59	-	MORGANTON		5	124	40.3		1	27	-
CHARLOTTE	5	53	2568	20.6	4	82	2009	40.8	NEW BERN		2	160	-	1	6	158	38.0
CONCORD		7	168	41.7	1	6	111	54.1	RALEIGH	2	32	1278	25.0		27	609	44.3
DURHAM		18	754	23.9	1	28	777	36.0	REDSVILLE		6	151	39.7	1	8	95	-
EDEN		6	188	42.6		4	58	-	RUANDKE RAPIDS	2	6	188	31.9		3	39	-
ELIZABETH CITY		3	123	-	1	3	81	-	ROCKY MOUNT E.		1	94	-		7	130	53.8
FAYETTEVILLE		25	991	25.2	1	34	617	55.1	ROCKY MOUNT N.		5	217	23.0		6	112	53.6
GASTONIA	2	22	736	31.2	1	8	252	31.7	ROCKY MOUNT C.		6	311	19.3		13	242	53.7
GOLDSBORO	2	10	291	34.4	1	13	244	53.3	SALISBURY		4	164	-	1	7	144	48.6
GREENSBORO	1	35	1598	21.9	6	44	1000	44.0	SANFORD		4	136	-		5	76	-
GREENVILLE		7	248	28.2		5	187	26.7	SHELBY		7	157	47.6		3	108	-
HENDERSON		4	170	-		5	141	35.5	STATESVILLE		5	157	25.4		6	164	36.6
HICKORY	1	14	266	48.0		5	120	41.7	THOMASVILLE		6	208	28.8		7	94	-
HIGH POINT	3	23	738	31.2	4	22	431	51.0	WILMINGTON	1	14	515	27.2	2	14	390	35.9
JACKSONVILLE	3	17	368	46.2		2	76	-	WILSON	1	3	259	-		8	248	32.3
KINSTON		9	247	36.4		11	231	47.6	WINSTON SALEM	1	24	1137	21.1	9	42	1073	39.1

PERINATAL DEATHS = STILLBIRTHS OF 20 WEEKS GESTATION OR MORE + NEONATAL DEATHS UNDER 28 DAYS OF AGE
TOTAL DELIVERIES = STILLBIRTHS OF 20 WEEKS GESTATION OR MORE + TOTAL LIVE BIRTHS
*PERINATAL DEATH RATE = PERINATAL DEATHS DIVIDED BY TOTAL DELIVERIES TIMES 1000
RATES ARE NOT CALCULATED FOR LESS THAN 100 DELIVERIES OR LESS THAN 5 PERINATAL DEATHS

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY October 1972, Vol. 33, No. 10

NORTH CAROLINA

Medical Journal

IN THIS ISSUE: Physician Care of Alcoholics: A Survey in Central North Carolina, John A. Ewing, M.D., Thomas Dukes, and Clark Sugg; Sleep Insurance: A Valid Use of Hypnotics? David Morrison, M.D., and Demmie G. Mayfield, M.D.; Candidal Granuloma: Report of a Case, Frank M. Houston, M.D.; Office Management for the Dermatologist, Elizabeth P. Kanof, M.D.; A Practitioner's Thoughts on Our Medicine: A Challenge for Local Medical Society Leadership, Julian F. Keith, M.D.

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January 26-27—Pinehurst

1973 ANNUAL SESSIONS
May 19-23—Pinehurst

1973 COMMITTEE CONCLAVE
September 26-29—Southern Pines



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and a few may need counseling
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PRESIDENT'S NEWSLETTER

NORTH CAROLINA MEDICAL SOCIETY

No. 5

October 5, 1972

THE FEDERAL GOVERNMENT, ACCORDING TO DR. JOSEPH COMBS, SECRETARY OF THE N. C. BOARD OF MEDICAL EXAMINERS, is taking the position that the Federal Supremacy Clause of the Constitution allows regulation of medicine on a Federal rather than a State basis. Thus, Washington authorities claim that who practices medicine and how they practice it is within their purview. There will be a meeting of the legal representatives of the State Boards of Medical Examiners in November, and our Board will be represented there by Attorney John Anderson.

DR. ROSCOE McMILLAN, CHAIRMAN OF THE COMMITTEE ADVISORY TO AUXILIARY AND ARCHIVES OF HISTORY has announced that the history of the North Carolina Medical Society will be available in October at a total pre-publication price of \$24.25 including mailing cost, and the Society membership is reminded that this can be ordered by the use of the convenient blank in the current North Carolina Medical Journal. The first 5,000 copies ordered during the current pre-publication period will be autographed by Dr. McMillan, as authorized by the Executive Council on the occasion of its October 1 meeting.

THE AMERICAN HOSPITAL ASSOCIATION has announced and is now distributing a rather complex and comprehensive loose-leaf volume to its member hospitals, entitled "Quality Assurance Program for Medical Care in the Hospital". The guidelines were developed under the aegis of the American Hospital Association's Division of Hospital Medical Staffs. It is noted in the introductory remarks for this program that "out of hospital surveillance programs as anticipated in pending legislation should not be substituted as an alternative to this program". It appears that everybody is trying to get in on the Peer Review act, and it may be that most of us will be involved in reviewing the activities of our cohorts through these multiple parallel programs rather than taking care of patients. The principle of peer review has long been accepted and carried out by organized medicine in many of its continuing activities, but it appears now that there will be great necessity for coordination of effort in order to avoid needless duplication as we get more into these programs.

PEDIATRICIANS AND THOSE INVOLVED IN POISON CONTROL PROGRAMS IN OUR STATE point out the continuing efforts to provide child-proof containers in instances where children might gain access to adult prescriptions. Some pediatricians are using a stamped request to the druggist on all prescriptions to use child-proof containers. Appeals are made to specialties dealing with young parents particularly to provide these containers to adults when children are in the family. It is hoped that this program can be strengthened by further cooperative effort between the Committee on Child Health and Infectious Diseases and the Committee Liaison to the N. C. Pharmaceutical Association.

CONGRATULATIONS ARE IN ORDER FOR DONALD KOONCE, M. D., OF WILMINGTON, EMERY L. RANN, M. D., OF CHARLOTTE, AND A. A. BEST, M. D., OF GREENVILLE, N. C. Dr. Koonce was elected by the Board of Trustees of the American Medical Association to a three year term on the Joint Commission on Accreditation of Hospitals. The National Medical Association has honored Dr. Rann by making him President-elect of the NMA and has chosen Dr. Best as physician of the year.

THE BUREAU OF THE CENSUS, it develops, is now in the process of conducting a "Current Medical Care Survey", which includes follow-up visits and interviews with representatives of the Census Bureau and which requests sample patients from the population to give dates of visits to the doctor along with the doctor's name and address and the total cost of the visit. The survey also includes visits to other health professionals, expense of transportation, purchase of medical supplies, drugs, etc., along with addresses of the pharmacists and prescription numbers. The first page of the survey says "All information which would permit identification of the individual will be strictly confidential and will be used only by persons engaged in and for purposes of the survey and will not be disclosed or released to others for any other purpose". This would, however, appear to be a rather ambitious attempt at interference between the doctor or other health professional and his patient.

THE HEALTH SERVICES INDUSTRY SUBCOMMITTEE FOR THE ECONOMIC STABILIZATION PROGRAM will conduct regional seminars in approximately another two weeks, and representatives of the North Carolina Medical Society will attend the meeting in Miami, bringing the problems of the North Carolina physicians to the attention of those involved with price control implementation. Mr. James Delaney, Executive Director of the program, interestingly enough, notes: "The inflationary potential (of the Health Industry) is in large part due to the industry's unique freedom from the normal laws of economics. It is an industry where suppliers can create their own demand and where demand normally exceeds the supply and is not altered significantly by price changes". I know that the physicians of North Carolina will be delighted to know that they are operating businesses which do not follow the normal economic law.

PHYSICIANS WHO ARE UNABLE TO SUBSTANTIATE dates of hospital visits may be subjected to retroactive denial of Medicare benefits, AMA's Division of Medical Practice warns. Medicare requires that physicians be able to provide documentary evidence of hospital visits. In recent isolated instances, physicians have been directed to refund Medicare payments made more than a year ago. In each case the physician had neglected to make an entry on the hospital record or to take other steps considered as acceptable proof by the Social Security Administration's Bureau of Health Insurance. To guide physicians, the AMA has developed an informational statement based on Medicare rules and verified by the BHI. It reads, in part: "Physicians submitting claims for hospital visits to Medicare patients should make sure that there is an entry on the hospital record for each patient substantiating the date of each visit. A hospital rule that physicians are to visit their patients daily is not considered sufficient evidence that such visits were in fact made. Acceptable evidence is the physician's progress notes on the hospital record for the day of the visit, or nurse's notes indicating that he visited the patient on that day. The patient's statement that a visit was made is acceptable only if taken within a reasonable time after the visit; entries in the physician's own office records are not considered as strong evidence as the hospital record."

Sincerely,



John Glasson, M. D.
President

PHYSICIAN CARE OF ALCOHOLICS

A Survey in Central North Carolina

John A. Ewing, M.D.,* Thomas Dukes,† and
Clark Sugg‡

THE University of North Carolina Center for Alcohol Studies is under a general mandate to investigate various aspects of alcohol use and abuse in North Carolina. In the summer of 1968, prior to the establishment of the Center, Ewing and Bakewell¹ arranged for medical students to survey 100 practicing physicians in Piedmont North Carolina. At that time none of these physicians volunteered that he used the drug disulfiram (Antabuse) in the management of chronic alcoholism. Thus in the summer of 1971 it was decided to determine which physicians treat alcoholics and how they do so. We focused our inquiry on Wake County, since we were planning the simultaneous development there of additional facilities for assisting in the treatment of incipient cases of alcoholism. Wake County is not a typical North Carolina county in that it is the seat of state government and therefore has a higher percentage of physicians involved in public health and administrative medicine. There is also a large state psychiatric hospital (Dorothea Dix Hospital) in the county.

METHOD

A brief questionnaire (Fig. 1), together with a stamped return envelope, was mailed to all known physicians in Wake County. It was hoped that keeping to a very simple format would encourage more physicians to take the time to respond. The Roster of Registered Physicians in North Carolina (published by the Board of Medical Examiners) and the

current Medical Society Roster (published by the NORTH CAROLINA MEDICAL JOURNAL) were used to obtain lists of physicians and their specialties.

RESULTS

Of the 277 registered physicians in Wake County, 131 (46 percent) completed and returned the questionnaire. This response rate is better than the 17.5 percent obtained in a recent national survey.² Of the nonrespondents (146), 42 were listed in specialties unlikely to have clinical contacts with alcoholics (pediatrics, ophthalmology, public health, and radiology, for example), but the type of practice of 31 of the nonrespondents could not be ascertained.

Of the 131 respondents, 25 were not in clinical practice and several others had to be eliminated because they failed to answer the questions. Since they deal with special populations, physicians engaged only in institutional practice were not included in this report.

Table 1 shows the numbers of all patients and of alcoholics estimated to be seen by physicians in four specialty areas. General practitioners reported seeing the largest number of alcoholics per week: an average of 3.9, with a range of 0-12.5. Internists and psychiatrists were next, reporting 1.8 and 2.6 alcoholics per physician per week respectively. By their own estimates, surgeons, obstetricians, and gynecologists see the smallest number of alcoholics, averaging only 0.6 per physician per week.

The responding physicians were divided into five groups according to the year of graduation from medical school. Physicians in the 1960-1969 group saw the largest number of alcoholics (3.6 per physician per week), while the 1930-1939 group reported

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‡ Medical students.

Reprint requests to the Department of Psychiatry, University of North Carolina School of Medicine, Chapel Hill, N. C. 27514.

August 12, 1971

Dear Doctor:

We are attempting to determine the extent of alcoholism as a medical problem in North Carolina. We hope that you can assist us in this attempt by answering the questions below. Please return this form in the envelope provided at your earliest convenience. Your answers will be held in strict confidence.

1. Total number of patients seen in your average week _____
2. Percent of above patients that are alcoholic _____
3. Treatment prescribed for alcoholics: (Please check applicable box)

	ALWAYS	SOMETIMES	NEVER
a. Refer to Psychiatrist			
b. Refer to other counseling service			
c. Prescribe Antabuse			
d. Other (Please describe) _____			
e. Refuse treatment			

Your help and cooperation are deeply appreciated.

Sincerely yours,

John A. Ewing
John A. Ewing, M.D.
Director

JAE/ew

Enclosure

Figure 1

only 0.7. There is no recognizable pattern to indicate difference in treatment methods used by physicians graduating in different decades.

Eighty-eight percent of these physicians report that they sometimes refer their patients to psychiatrists, and 79 percent may refer their patients to other counseling services. Forty percent of Wake County physicians sometimes prescribe Antabuse; the others say that they never give this drug. Eighty-three percent choose other courses of treatment: Referral to Alcoholics Anonymous was the most common disposition of alcoholic patients; tranquilizers, diazepam (Valium), and antidepressants were the next most frequent answers; group therapy, hospitalization, chlorthalidone (Librium), and crisis intervention were listed by one physician each.

DISCUSSION

The analysis by specialty provides some interesting information. General practitioners and internists report seeing more alcoholic patients per week than do psychiatrists and surgeons. Psychiatrists see fewer patients per week, however, and presumably spend more time in the treatment of individual alcoholic patients. The most frequent reasons for not treating alcoholics given in another study³ were listed as "difficult," "time-consuming," and "unrewarding." It has also been found that physicians scoring highest on

Table 1

Estimated Total Numbers of Patients and Alcoholic Patients Seen Weekly by Responding Physicians in 4 Categories of Practice

Practice Category	All Patients Seen per Week			Alcoholic Patients Seen per Week		
	Total	Average per Physician	Range	Total	Average per Physician	Range
General Practice (N=17)	2,820	166	50-300	67	3.9	0-12.5
Internal Medicine (N=15)	1,690	112	45-200	40	2.6	0-9.9
Surgery and OB-GYN (N=18)	2,024	112	50-225	11	0.6	0-4
Psychiatry (N=3)	102	34	22-55	5.4	1.8	0-4.4

authoritarian scales are the least likely to treat alcoholics.⁴

If it is assumed that the responses we received are representative of all practicing physicians in Wake County, we can estimate that the 40 general practitioners see an average of 156 alcoholic patients per week, 20 psychiatrists see 36, 44 internists see 114, and 65 surgeons and obstetricians see 39. This would mean that about 345 alcoholic patients have medical contacts in Wake County per week.

Another study of Wake County physicians⁵ revealed that 26 out of 41 reported that they treat drug abuse patients. During 1970 these 26 physicians treated 505 alcoholics, or an average of 19.4 per physician. These figures are not incompatible with ours, since a physician is likely to see any one alcoholic patient several times a year. Thus a report of patients treated "in the past week" is likely to reveal a relatively higher figure. A patient seen many times in the year will be recalled as just one person when a physician is reporting his last year's work. There is undoubtedly overlapping in patient populations, so that one patient may see more than one physician.

An earlier study in New Jersey⁶ disclosed that a little more than half of the physicians treated chronic alcoholics themselves, while the rest referred these patients somewhere else. Only 9 percent of the respondents in our survey indicated that they never refer a patient to another counseling service. In a study of Iowa physicians,⁷ more than one half of general practitioners and internists were treating one or more patients who had a diagnosis of primary alcoholism. Although the data in our survey are not strictly comparable, they do suggest that today's physicians may be making wider use of referral services. Of course, referral resources have improved during that period of time. In the national survey,² 24-49 percent of physicians (depending on specialty) reported that they regularly prescribe Antabuse, with the highest percentage representing psychiatrists. Our figure of 40 percent who say that they sometimes use this

drug demonstrates a considerable improvement over the zero figure found in 1968.

It is of interest that more Wake County physicians listed Alcoholics Anonymous than tranquilizers in the category of "other treatment." Other surveys^{6, 8} have indicated that physicians have a great deal of faith in Alcoholics Anonymous.

Eight percent of our respondents reported that they always refuse to accept alcoholics for treatment, and 56 percent said that they sometimes do. Many of these physicians qualified their responses by adding that it is not because of the alcoholism per se that they refuse treatment, but because their practice lies in another field (for example, ophthalmology).

We do not know the number of alcoholics in Wake County, but an estimate based on the total adult population (5 percent) suggests that from 5 to 6 thousand cases of heavy, excessive drinking and alcoholism must exist in the area. If we exclude the physicians in specialties unlikely to see alcoholics or who are not known to be in clinical practice, we have at least 169 in Wake County. At the lower estimate of 5,000 alcoholics, this would be 29 potential alcoholic patients per physician. Our projected figures (based on 345 weekly contacts with alcoholics by general practitioners, internists, surgeons, and psychiatrists) suggest that there are almost 19,000 visits to doctors by alcoholics per annum in Wake County. This indicates roughly that alcoholic patients see physicians for one reason or another on an average of three or four times a year. Obviously some may see doctors more frequently than that, while

others never do. If this conclusion is justified (and it is approximately confirmed by the study of Holder and Britt⁵), we can state that the medical profession is a significant body for the identification of alcoholics, their treatment in the doctor's office, or their referral to treatment facilities elsewhere.

SUMMARY

A survey of Wake County physicians suggests that a majority of them do provide medical and referral services for alcoholic patients and that the average alcoholic patient may make as many as three or four doctor-visits per year. Thus, the medical doctor is the logical person to identify alcoholism at the earliest stage possible so that a treatment plan can be initiated.

Acknowledgment

The authors are grateful to the Wake County physicians who took the time and effort to respond to our questionnaire.

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An inflammation of the womb is a dangerous and not unfrequent disease after delivery. It is known by pains in the lower part of the belly, which are greatly increased upon touching; by the tension or tightness of the parts; great weakness; change of countenance; a constant fever, with a weak and hard pulse; a slight delirium or raving; sometimes incessant vomiting; a hiccup; a discharge of reddish, foetid, sharp water from the womb; an inclination to go frequently to stool; a heat, and sometimes total suppression of urine. — William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 364.

Sleep Insurance: A Valid Use of Hypnotics?

David Morrison, M.D., and Demmie G. Mayfield, M.D.

DRUG abuse is a major current problem. In this context attention has appropriately been called to problems within the medical profession. President Nixon commented on this in an address to the American Medical Association in June, 1971: "A number of voices from your community have suggested recently that certain drugs may well become a crutch for some doctors as well as their patients, masking but not correcting more basic physical and emotional problems."¹

Perhaps the group of drugs most likely to become a "crutch" for physicians is sleeping pills, or hypnotics. In a survey of physicians in California, Kales² found that 38 percent of their patients had been taking sleeping pills for three months or more and 54 percent for one month or more. When he asked these physicians what effect they thought withdrawal of sleeping pills had on sleep and dream patterns, 83 percent answered, "No information." Kane,³ putting heavy emphasis on sleep studies, pointed out that most hypnotics only allow a patient to "borrow sleep" which must be paid back. He called for more rational use of sleeping pills.

Many studies have called attention to the problem. However, details of when, how, and why physicians misuse hypnotics have not been reported. In particular, systematic studies of how hospital physicians use hypnotic drugs are not available.

The present study was conducted in a teaching hospital where, it might be supposed, the most thoughtful and rational use of drugs is to be found. We felt that a study conducted in this setting would

yield findings which would predict future drug use, since the prescribing habits practiced by the house staff and adopted by the medical students who observe them probably are a preview of the drug usage to be expected of the next generation of practitioners.

METHOD

The study was conducted at the Durham Veterans Administration Hospital, a 500-bed general hospital affiliated with Duke University Medical Center. Patient care is rendered primarily by resident physicians who rotate through the VA Hospital from Duke for periods of three to six months. The resident house staff supervises a full complement of medical students and interns. Senior staff members all have faculty appointments in the medical school. The hospital is divided into wards of 30 to 35 patients located in a 20- to 25-bed ward room plus a few four-bed, two-bed, and single-bed rooms. The hospital is primarily an inpatient facility and does not have outpatient clinics as such. Following a period of hospitalization, however, patients may be placed in a post-hospital care category and followed up as outpatients and receive medications from the pharmacy.

The term hypnotic is used in this study to define those drugs commonly used as sleeping pills. These were evaluated by surveying outpatient prescriptions over a one-year period, and by reviewing in detail current clinical records on certain medical and surgical wards. Finally, staff nurses primarily concerned with administering hypnotic drugs were interviewed and data systematically collected regarding their experience with and opinions about the use of sedative drugs.

For the outpatient survey all prescriptions for the

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study drugs presented to the pharmacy January 1, 1970, through December 31, 1970 were reviewed. The inpatient survey consisted of an inventory of pharmacy order sheets for the same period.

The current record review was conducted every two weeks on the following wards: two general surgical wards and three surgical specialty wards (orthopedic surgery, urology, and a ward combining ENT, ophthalmology, and plastic surgery). On the survey day the records of those patients hospitalized more than seven days were reviewed. Data were systematically recorded as to patient identification, diagnosis, hypnotics administered, dosage of hypnotic drugs, whether the drugs had been discontinued or were still being given at the time of survey, and relevant statements regarding drugs and behavior in work-up, progress notes, and nurses notes.

RESULTS

Outpatient survey

Each patient presented either or both his hospital discharge slip and his next clinic appointment slip together with his prescriptions. If the amount of medication prescribed exceeded that necessary to last until the next appointment, the amount was corrected by the pharmacist to correspond to the interval until the next visit. Prescriptions marked to be refilled were in effect altered downward, as the pharmacy retained the scripts and refill requests were not honored.

In reviewing the prescriptions we noted the amount prescribed and the amount actually dispensed. Those prescriptions which were altered downward we categorized as "overwritten." Each prescription was also categorized according to intended use. If a prescription for a hypnotic was written for more than 30 days' use, it was categorized as a "maintenance" dose.

Two hypnotics, secobarbital (Seconal) and ethchlorvynol (Placidyl) were prescribed for outpatients. The outpatient use of ethchlorvynol was 57.9 percent of the drug used by the hospital; the figure for secobarbital was a smaller but still a substantial 20 percent. For ethchlorvynol, 24 percent of the 190 prescriptions were overwritten and 58 percent were written for maintenance use. Of 189 prescriptions for secobarbital, 37 percent were overwritten and 59 percent were for maintenance use.

Inpatient survey

Secobarbital, chloral hydrate, and ethchlorvynol were the hypnotics used by the inpatient services. Secobarbital was the most widely used, with chloral hydrate a strong second and ethchlorvynol a distant third.

An average hypnotic dose per patient per month was computed for each survey ward. One dose represented a 100-mg secobarbital capsule, a 500-mg eth-

chlorvynol capsule, or 500 mg (5 ml) of chloral hydrate. The figures were obtained by dividing the total number of doses by the average daily patient census on the ward and then dividing by 12. Combining all three hypnotics, the average number of doses per patient per month was very nearly similar for general surgery and medicine (7.2 and 7.9, respectively). The figure for urology was 4.5, while the combined figure for the plastic surgery-ENT-ophthalmology ward was 5.0. Using far more than the others was orthopedic surgery, with an average of 17.0 doses per patient per month.

Current record review

The charts of 485 inpatients were reviewed: 174 patients from the general medical service, 140 patients from the general surgical service, and 171 patients from the surgical subspecialty wards.

Hypnotic drug usage was evaluated by recording for each drug when and how it was ordered and the amount administered. Hypnotics were ordered for 92 per cent of surgical specialty patients, 85 percent of general surgical patients, and 66 percent of medical patients. In general, it seemed that *h.s. p.r.n.* medication was ordered routinely, unless the patient was seriously ill at the time of admission. The actual dispensing of hypnotics was less common, with only 54 percent of surgical specialty patients, 49 percent of general surgical patients, and 41 percent of medical patients actually receiving a hypnotic.

In only a few cases did we find patients receiving hypnotics for as many as seven nights consecutively. The average number of nights per month of stay that patients actually received hypnotics was 9.5 for medical patients, 7.1 for surgical patients, and 6.2 for surgical specialty patients.

Nurse survey

It was apparent from the routine use of *h.s. p.r.n.* orders that the nurses controlled the administration of hypnotic drugs. We therefore conducted a survey of opinion and practice of the nurses concerned with dispensing hypnotics on the survey wards. Fourteen nurses regularly covered the evening shift on the survey wards, and 13 of these were interviewed. Six were from the medical wards, five from surgical specialty wards, and two from the general surgery service. A 15- 45-minute interview was conducted with each nurse individually on the ward during the evening shift. The interview consisted of an explanation of the purpose of the study, a standard questionnaire about specific practices, and a general inquiry about the use of drugs. The answers to the specific questions were systematically recorded on a data sheet and other information was recorded in narrative.

There was little agreement among nurses as to the exact meaning of *h.s. p.r.n.* Six nurses gave sleeping medication at the patient's request. Five nurses gave

hypnotics only if the patient requested it and gave evidence of difficulty in sleeping. The evidence required varied from being awake at a certain hour to remaining awake one hour after the first request for a pill. One nurse gave medication if there were some evidence of insomnia whether or not the patient requested it. One nurse made a routine inquiry early in the evening of all patients who had *h.s. p.r.n.* orders and gave a hypnotic to every patient who did not refuse it.

Three nurses were not aware of any problems associated with hypnotics. Eight nurses were concerned about the abuse-addiction potential of the drugs, and seven nurses were concerned that overuse might engender an undesirable drug orientation among the patients. Five nurses were wary of acute complications such as paradoxical excitement in the elderly, and patients becoming intoxicated and falling when getting out of bed. Two nurses were aware of side effects such as hangover, allergic reactions, and the like.

There was general concern about hospital policy regarding the use of hypnotics. Nine nurses thought that hypnotic drug use was too liberal and four thought it was about right. Seven nurses felt the need for more well defined guidelines regarding the use of hypnotics, and five expressed a desire for the hospital to exercise more control over the use of the drugs. None felt that present controls were too stringent.

It appeared to all the nurses that physicians ordered hypnotics routinely and failed to monitor their use. If the physician exerted any pressure at all it was likely to be in the direction of more liberal dispensing of hypnotics. This pressure was apparently in response to complaints from patients to doctors that medication was not given on request.

The six nurses on the medicine service volunteered that charting of hypnotics was not consistent because of a lack of time. Thus, more hypnotics were actually given than were recorded.

DISCUSSION

The results of the present study underline the limitations of large scale studies that report the quantities of drugs dispensed. The quantities of hypnotics administered to inpatients and outpatients in our survey were not dramatic and could lead one to conclude that hypnotic use in the hospital was careful and well thought out. Unfortunately, a closer survey of charts told a different story.

Our findings indicate that in the use of hypnotic drugs, there is no pretense of employing a rationale. The method of prescribing these drugs is unique in that no judgment is made regarding whether or not they should be ordered. They are not ordered on basis of a symptom, clinical syndrome, physical finding, or laboratory finding. They are routinely ordered for most patients regardless of the diagnostic

category. There is no provision for recording sleep so that the effects of the drug could be monitored. The degree of moderation which is exercised in the dispensing of these drugs is primarily a reflection of the judgment of the nurse.

Is regulation effective in controlling overuse of sleeping pills? The most common administrative device employed to inhibit the unmonitored dispensing of hypnotic drugs is to require the renewal of orders at regular intervals—for example, every 72 hours. The hope is that such a checkpoint will alert the physician to a problem which he would otherwise ignore. In our experience this is a vain hope; the physicians, nurses, and ward clerks incorporate this requirement into their routine so that it is only a minor nuisance. The result is, we suspect, paradoxical; the routine thoughtless habit of prescribing hypnotic drugs is reinforced rather than diminished by forcing the writing of orders for these drugs in a reflex fashion. This clearly does not solve the problem, and we doubt that any simple regulation will have much effect.

We feel that the routine incorporation of a *p.r.n.* order for hypnotics in admission orders is unacceptable medical practice. It is especially unfortunate when medical students adopt this habit by example. Caveats and administrative devices do not seem to be the solution. Misuse of hypnotic drugs will be eliminated only by a more thoughtful, sophisticated approach to their clinical application.

Managing sleep with drugs should not be undertaken any more casually than the pharmacological manipulation of other pathophysiology. Prior to prescribing a hypnotic, physicians should, at a minimum, answer these questions: Is there a sleep disturbance? If so, should it be treated? If so, should it be treated pharmacologically? If so, can drugs which are less mischievous be employed? The application of such a rudimentary inquiry would make hypnotic drug use purposeful, more often effective, and would eliminate most overuse. The sedative drugs which are not central nervous system cortical depressant (for example, diphenhydramine (Benadryl), promethazine (Phenergan), and hydroxyzine (Atarax, Vistaril) are effective hypnotics and are free of almost all of the drawbacks associated with barbiturate and barbiturate-like sedative-hypnotics. These drugs do not produce the drunkenness so often associated with barbiturates, and they do not appeal to individuals who seek out intoxication with such drugs. These drugs are not associated with dependency, tolerance, addiction, or the withdrawal syndromes seen with all the barbiturate and barbiturate-like hypnotics. Finally, the possibility of a successful suicide attempt is much less with these drugs than with the general central nervous system depressant group of drugs.

One of the most disturbing aspects of our findings is that the philosophy implied in these practices un-

doubtedly engenders or reinforces a certain drug orientation among patients and the population in general. It is currently popular to decry the drug orientation pervasive in our culture and to seek the causes. A prime culprit at present seems to be the pharmaceutical advertisers, who, via the mass media, press chemical solutions to nonchemical problems. The medical profession has participated in this criticism and rightly so.⁴ A good case could be made, however, for the proposition that the hospital is the greatest purveyor of the message that it is appropriate, even desirable, to routinely insure sleep with a drug.

SUMMARY

The use of hypnotic drugs was studied in a 500-bed teaching hospital by making a one-year survey of outpatient prescriptions, a one-year survey of drug requisitions from selected wards, an intensive

review of 485 charts of currently hospitalized medical and surgical patients, and interviews with night shift nurses responsible for dispensing sleeping pills. While the quantities of hypnotics dispensed to outpatients and used by the inpatient services were not dramatic, a detailed study revealed that hypnotics were automatically prescribed without regard to history, physical findings, or laboratory findings. The contribution made by physicians to an already disturbing drug orientation in the population is discussed, and a more rational approach to the use of hypnotics is outlined.

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. . . Every woman with child ought to be kept cheerful and easy in her mind. Her appetites, even though depraved, ought to be indulged as far as prudence will permit. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 362.*

Candidal Granuloma: Report of a Case

Frank M. Houston, M.D.

THE following case illustrates the clinical features of candidal granuloma, a rare manifestation of infection with *Candida albicans*, of which there have been 30 previous reports in the British-American literature.

CASE REPORT

An 11-year-old Negro girl was seen and treated at the Children's Medical and Surgical Clinic of the Johns Hopkins Hospital during November and December, 1967.

History: The patient was first noted to have white plaque-like lesions of the mouth at two years of age. Subsequently, lesions of a granulomatous nature developed on her scalp. Various topical creams and ointments failed to influence the disease process, and she was hospitalized briefly at Cambridge Hospital twice between the ages of 2 and 5 years. She continued to have lesions most noticeably around the fingernails. At age 5 she was admitted to Johns Hopkins Hospital with horn-like granulomas on the ears, nose, mandible and occiput, in addition to the previous lesions of the mucous membranes and perungual region. Cultures established the diagnosis of candidiasis. Hypergammaglobulinemia was discovered. Tests for adrenal and gastrointestinal abnormalities were negative, as were deep fungal skin tests. On intermittent topical therapy her condition progressed over the next six years. She was readmitted to Johns Hopkins on Nov. 29, 1967.

Her family, consisting of mother, aged 36, father aged 44, and five siblings, ages 2-13, were well and free of cutaneous disease.

Review of the systems were unrevealing except for a marked personality disorder probably related to the disfiguring skin lesions.

Physical Examination: The patient, a shy, bizarre appearing young Negro girl, was markedly withdrawn and uncommunicative. There were hyper-pigmented horn-like exophytic lesions present over her face, scalp, ears, shoulders, knees, toes, oral cavity, and vagina.

Laboratory findings were normal except for a serum protein value of 9.9 gm/100 ml, an albumin-globulin ratio of 3.8/6.1 gm/100 ml, and increased beta and gamma globulins on protein electrophoresis. A potassium hydroxide preparation from the skin crusts showed mycelial elements and blastospores. Deep fungal skin tests were negative; PPD skin test of intermediate strength was positive; candidal skin test showed 2 cm of induration in three hours; trichophytin skin test was positive. Culture on Sabouraud's medium revealed *C. albicans*. There was normal lymphocyte transformation in response to phytohemagglutinin.

Roentgenograms of the chest, skull, hands and upper gastrointestinal tract were normal. Electrocardiogram showed low voltage LVH reverting to normal.

Histopathological examination showed a stratum corneum with marked hyperkeratosis and parakeratosis. The epidermis showed marked acanthosis and papillomatosis, with derangement of prickle cell maturation and progression. There was a heavy dermal infiltrate of small and large mononuclear cells throughout the entire dermis. On PAS stain, many thick, non-branching, septate pseudohyphae were seen surrounded by blastospores. These structures were found throughout the stratum corneum and in the granulomatous dermal infiltrate.

Hospital course: A course of amphotericin B was begun at a dosage of 1 mg and increased in increments of 1 mg per day until a level of 25 mg (1 mg/kg) was reached. Over a 50-day period, the patient received 29 doses of amphotericin B, a total of

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Table 1
Clinical Features

	Hauser and Rothman 1950	Kugelman et al 1963	Total 1963	Percent
Number of cases	6	17	23	
Age at onset				
Less than 1 year	4	7	11	48
1-12 years	2	10	12	52
Sex				
Male	5	7	12	52
Female	1	10	11	48
Primary involvement				
Oral cavity	4	14	18	78
Scalp and/or face	2	3	5	22
Other sites of involvement				
Face	6	16	22	96
Oral cavity	6	17	23	100
Scalp	4	13	17	74
Trunk	3	6	9	39
Fingernails	6	15	21	91
Sites of granulomas				
Face and scalp	6	15	21	91
Other	2	4	6	26
Deaths	5	1	6	26

630 mg. Therapy was intermittently halted because of complications including fever, thrombophlebitis, BUN elevation, hypokalemia, anemia, cardiomyopathy, proteinuria, and melena. Topical salicylic acid ointment (10 percent concentration) and amphotericin B Cream were used concomitantly. The patient showed improvement after the sixth week of therapy. At the time of discharge all cutaneous granulomas had regressed, the mucous membranes were free of lesions, and cultures were negative.

DISCUSSION

Candidosis and the synonymous terms "candidiasis" and "moniliasis" imply an inflammatory response to the invasion of an organ system by one or another member of the genus *Candida*. *Candida albicans* is the most common offender, and the cutaneous system, the usual site of infection.

This invasion and consequent inflammatory response is a superficial phenomenon, except in the uncommon case of systemic candidosis and the rare occurrence of cutaneous candidal granuloma, first reported by Forbes in 1909.¹

An extensive review of the literature by Kugelman and associates² in 1963 made the following points about candidal granuloma:

- Distribution—worldwide.
- Predisposing factors—none known.
- Race or sex preponderance—probably none.
- Age at onset—usually under six years.
- Duration—lifelong except as modified by treatment.
- Prognosis—leads to debilitation and death if untreated.
- Event precipitating initial attack of candidiasis—often acute bacterial infection.

Site of initial involvement with *Candida*—usually oral (thrush).

Sites of granuloma formation—most commonly face and scalp, occasionally other sites—nails.

Common additional manifestations of infection—perleche, paronychia, onychomycosis, vulvovaginitis, superficial cutaneous candidiasis.

Visceral involvement with *Candida*—none.

Underlying systemic disease or constitutional defect—usually none found.

Effective therapy — intravenous amphotericin B only.

A summary of the principal clinical features of candidal granuloma as noted by Hauser and Rothman³ and Kugelman and others² is given in the table.

Since the report of Kugelman and his associates there have been studies by Newcomer,⁴ Rapaport,⁵ Chilgren,⁶ and Imperato⁷ indicating defective delayed hypersensitivity in patients with candidal granuloma. The present patient did not demonstrate such a defect in so far as she was tested; however, homograft rejection and sensitization to dinitrochlorobenzene were not studied. She did, however, demonstrate hypergammaglobulinemia as has been reported by Engel⁸ and Wachs.⁹

In summary, the diagnosis of candidal granuloma is established by (1) clinical picture, (2) direct potassium hydroxide preparations, (3) biopsy, and (4) culture. Therapy for candidal granuloma includes intravenous administration of amphotericin B begun at low dosage (1 mg) and increased in increments of 1 mg until 1 mg per kg is reached and maintained until clearing results. Careful baseline evaluation of the renal, cardiac, and hematopoietic systems is in order, together with careful monitoring of these systems as well as serum electrolytes throughout the course of treatment.

It would seem likely that patients with candidal granuloma have either an immunological defect of the delayed hypersensitivity response or dysgammaglobulinemia or both. Further study of both immunoglobulins and lymphocyte-mediated hypersensitivity are needed in all such patients in order to locate the precise abnormality.

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Office Management for the Dermatologist

Elizabeth P. Kanof, M.D.

THE Nov. 6, 1970 issue of *Medical World News*¹ contained a survey indicating that the dermatologist in a well managed solo practice could anticipate a gross annual income of approximately \$78,000. Characteristics of such a practice were effective use of office space and personnel, efficient record keeping and billing procedures, and a high collection ratio. Net income would also be expected to be high in such a practice,

The purpose of this paper is to review pertinent factors in successful office management. Barefoot² has indicated that the dermatologist in partnership practice carries an overhead of 37 percent, while the overhead of the solo practitioner averages 41 percent. These statistics parallel a 1970 survey by Professional Business Management, Inc. of Chicago, which found the average overhead to be 42 percent based on a collection ratio of 98.3 per cent.³

Dr. Barefoot suggested that the lower overhead of partnership practice may be attributable to the large number of return patients seen. It is also possible that the partnership arrangement, by its very existence, fosters more time and discussion devoted to office management, with or without the ancillary advice of professional management consultants. His study also indicated that physicians over 55 years of age have the highest earnings. It should be noted that the rental in older professional buildings can be as low as \$1.54 per square foot as compared to the average rental of \$5.00 per square foot in newer buildings in Raleigh, North Carolina, as of July, 1970.* The younger dermatologist will have to pay even greater

attention to the problem of office management if he is to overcome this immediate discrepancy in rent when starting a practice in North Carolina today.

The young dermatologist completing his residency is familiar with today's medical atmosphere, but has little knowledge of the economic aspects of the private practice of medicine. He finds himself unprepared for office management and community involvement apart from a hospital setting. He must choose a location, select an office and home, secure licenses, establish liaison with the local medical society, his colleagues and community hospitals, all the while confronted with major business decisions.

The first major decision will be to determine the kind of practice: solo, expense sharing, purchase of an existing practice, salary leading to partnership, salaried associate or group practice, with single versus multispecialties. In looking for a particular opportunity to practice he can check with placement services offered by state or county medical societies or listings in medical journals, and he is influenced strongly by what he hears by word of mouth. He will have to determine the professional and personal prospects of the community. Once the location is chosen, his next concern will be to find an office location and determine the method of payment for the required space. I recommend the luxury of choosing a place of practice based solely on where one wishes to live and work only if there is adequate financial reserve to fall back upon for a minimum of two years.

OFFICE PLANNING AND EQUIPMENT NEEDS

The rent or vested lease will likely consume 7 percent of the total office overhead.³ Renting or leasing an office is the preferred choice of most phy-

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* Personal communication from Mr. Donald Carpenter, Vice President, First-Citizens Bank and Trust Company, Raleigh, N. C.

sicians setting up their first practice.⁴ The solo practitioner in dermatology will feel cramped within three years in an area of less than 1,000 square feet. Most standard office buildings can be adapted easily to the dermatologist regardless of his use of x-ray therapy. It is essential that the lease be reviewed by the physician's attorney,⁵ checking provisions for maintenance, redecoration or structural changes, and services and expenses, if any, to be assumed by the building owner. All agreements should be written into the lease. An option to renew or conditions for termination should be stated. In many instances the initial month's rent or deposit may be waived.

The leasing of hospital space by physicians is available in some locations. This saves travel time; the hospital setting is a potential source of referrals, approximating the advantages of group practice without the need to join one.

To build from scratch initially should be discouraged. The pitfalls in investing immediately in property and a new structure for a beginner in practice are numerous.

It would be unrealistic to assume that the new physician will meet his office expenses before three to five months in practice or his living expenses before seven to nine months in practice unless he is starting in an area where the need for a dermatologist is great.

Let us assume that the 1000 square feet will be divided into the waiting and reception area, the business and administrative area, and the medical practice area. An estimate of the minimal total initial expenditure needed to furnish and supply this space for the solo practitioner, excluding x-ray and dictating equipment, was \$7,000 as of 1970. This figure is based on a national survey and parallels my own experience. Many physicians who desire more space, additional laboratory facilities, and the convenience of hydraulic tables can easily find themselves with a total expenditure of \$10,000 to \$15,000 (Personal survey of dermatologists in practice less than five years in North Carolina).

The physician will also need a lawyer, an accountant, and an answering service, and should consider seriously the services of a professional management consultant. If a consultant is desired, he should be selected as carefully as any other adviser by seeking suggestions and opinions from the local medical society and other doctors using such services. A professional consultant can assist the physician in many ways: by setting up the books, advising and assisting in collections, interviewing and screening aides, and reviewing the books monthly for progress reports, tax purposes, etc. Most physicians will also consider the services of a collection bureau to handle the problem of delinquent accounts. Many of these agencies offer some of the same services as the management consultant at no additional cost. An insurance broker will also be needed to determine the profes-

sional liability, owner or tenant premises liability, and optionals such as disability income, fire, theft, employee insurance, workman's compensation, and life insurance.

OFFICE PERSONNEL

A major consideration is the selection of competent aides. Once they have been employed, it is useful to rotate their assignments in the office at least occasionally. In this way the office will function reasonably well when a staff member is out for unexpected illness. Their pay will comprise roughly 15 percent of the total overhead⁶ and will be determined by regional rates and previous experience. Initially one secretary-receptionist may serve in all capacities, with the later addition of a competent employee to assist directly with the care of patients.

Mopper,⁷ in a symposium on organization of an efficient office, suggests 2 to 2.5 nurses or licensed practical nurses per doctor, plus a secretary. Unless the solo practitioner wishes to see more than 50 patients per day, he can easily manage with a total of 2.2 assistants provided he hires people who like to work!

Sources of new employees are classified advertisements, employment agencies, business schools, other doctor aides, management consultants, and hospitals. Use of a box number weeds out unlikely candidates and requires a written letter or application as an initial test for qualifications. An advertisement must explicitly state essential duties expected, the experience desired, and the salary offered. References should be required and should be checked by phone rather than by mail.

Former employment is no guarantee of reliability or competence. The candidate's health and drug history should be reviewed. A typing, penmanship, shorthand, and spelling test should be prepared in advance. This test should be done in your office under your direct supervision. If on the applicant's first exposure to dermatological terms the words are repeated as they sound, learning will be rapid; if the sound of our vast lingo is not grasped, it will be a hopeless task to teach it. Discuss vacation time, sick time, salary increases. Emphasize prompt beginnings and endings of the working day. Set aside future time for gripe sessions, and let your aide know your overall objectives and philosophy in the practice of medicine in order that she may complement your needs.

I strongly question the need for registered nurses in the dermatologist's office, especially when their services are needed so desperately elsewhere. You will need time to train your own assistant in the specialized needs of patient instructions, patch testing, culture techniques, and many other areas of assistance not included in basic nurses' training. The most important consideration by far is the quality of the individual: intelligence, education, motivation for working, maturity, understanding, poise, and the

ability to learn and to adapt to new situations expected and unexpected. With these qualities the aide can be trained not only to handle the front desk, assist in patient care or both, but can be trusted to handle the vast majority of all telephone calls, including relaying patients' questions and returning answers. Without this assistance the phone will wreck your schedule⁸ and your psyche. Before leaving the problem of the phone, I would add that an efficient system of interoffice communications is essential; a consultant from the local telephone company or a private communications association will study your office communications system, and upon request, design a system to provide maximum efficiency at minimum cost.⁹

After hiring his office staff, the physician must not evade his training responsibilities, which will ultimately determine the productivity of his office and be a most important factor in avoiding malpractice litigation.

RECORDS

Medical

Adequate medical records are essential for following patient care, medicolegal purposes, and preparation of insurance forms directly from the chart, which will save the physician many hours of dictation. Charts should be color-coded when they are prepared for the first time each year. A different color for each year should be determined and made clearly visible, enabling rapid separation of inactive charts at a later date.¹⁰ The best way to store old records of more than 3000 pages is to put them on microfilm at a cost of \$15.00 per 1000 documents—which is less than a year's storage charges on the same volume of records.¹¹

Adequate registration information is needed for clinical and financial records. This should include name, address, telephone, employer, spouse's employer, referral, and party responsible for payment. If the present complaint is indicated, this will facilitate placement in the proper examining room. A folder arrangement of some type is desirable for the additional items which will require filing. It is possible to send records out for the completion of insurance forms by a professional medical claims association which offers pickup and delivery service, makes photostatic copies for office files, and returns the completed forms ready to be mailed requiring only the doctor's signature. This service is expensive, however—\$1.75 per form including postage. (Compiled claims, Shady Knoll Court, Raleigh, N. C.)

Financial

There are many good systems for keeping good financial records. The various possibilities should be discussed carefully before a final decision is reached. A daily sheet is needed to record the charges and payments for the day, and should be

kept separate from the appointment book. At the end of the day the physician should check his charts against the daily sheet to be sure that all visits have been entered. This is also a check on the daily receipts. Financial records should be kept up to date each day. Failure of the physician to check the book routinely at the end of the day is the first step toward carelessness, uncorrected errors, and embezzlement. The intricacies of embezzlement are ruefully discussed in a recent issue of *Medical Economics*.¹²

Information is then transferred to a patient's individual account record or ledger card. This record determines the patient's financial statement. The card must list each family member by name or code number, itemization of services rendered, and the charges.

A cash disbursement ledger may be combined with the permanent office ledger used to record all income and expenditures. A physician's income tax, periodic financial status reports, and yearly statements are prepared from the permanent ledger. The proper forms may be decided upon by the physician's financial consultant or by purchasing a daily log from a supply house*. All expenses and earnings are tabulated and summarized. One need only to be willing to spend an hour a month tabulating the results.

Some petty cash is essential for change and small items. The aide should record all monies taken out and reason for the expenditure. I recommend deliberately leaving some petty cash for nocturnal intruders; it may save worse destruction on the part of a frustrated robber or addict. A few narcotics should also be kept in a designated place as a peace offering to would be attackers. The location of emergency resuscitation equipment and medication should be readily accessible and known to all members of the staff.

BILLING SYSTEMS

The type of billing system used by a doctor will depend for the most part on his volume of practice. Initially, accounts receivable can be recorded in a financial ledger and the single aide can type and mail the statements monthly. Once the volume increases this will no longer be practical. The oldest method, preferred by professional management consultants¹³ and also recommended by Mopper, employs a pegboard with pegs arranged in a column down one side. The charge or visit slips for the patient, ledger card, and day sheet are punched to match the holes in the board. These three forms are then aligned on the board with the pegs, and by use of carbons, each entry is simultaneously recorded on all three forms. This minimizes the chance of errors and saves the time of transferring the charges to the ledger card. Another system uses posting or bookkeeping machines for billing. A ledger-posting machine

* One such firm is the Cowell Company, 201 Kenyon Road, Champaign, Ill. 61820.

will cost from \$1,100 to \$3,600. The information can also be recorded by hand, provided the responsibility for keeping financial records can be divided between persons in the office.

The patient's copy in the pegboard system is his bill, which encourages on-the-spot payment and saves on billing and mailing costs, at least to some extent. Of course if all of us would band together and obliterate the concept of billing altogether, it would reduce the physician's overhead considerably and thereby slow the ever-increasing fee scale (up by 7.5 percent according to the Consumers Price Index for 1970).¹⁴ Tradition, however, dictates otherwise locally and nationally.¹⁵ Compounding our difficulties is the emergence of the credit card. Before you accept these, be sure to review the difficulties of correcting computer errors, the steep interest rates commonly charged by card issuers, and the bills run up by card-carrying thieves.¹⁶

Photocopy billing may be combined with the pegboard system by reduplicating the ledger card as a statement. A photocopier will cost from \$500 to \$1,200 depending on the type.

When billing time gets more hectic, one might consider the services of a copy van or mobile billing service. The staff still draws the cards to be billed. The van takes them out of the office for a few hours, runs, folds, and inserts the bills and includes postage. The additional cost of two cents extra per statement is not great when one considers that the staff is now free for other duties.

The solo practitioner with large volume billings of more than 500 statements per month or physicians in partnership or group practices might consider a computerized billing service. The physician's statements are changed into numerical codes and fed into the computer, which then prints itemized bills. Some services will also compute a weekly total of charges and payments, itemize services rendered, and analyze delinquent accounts. In group practices, individual production records may be separated to show each physician's activity. Copies can be used for insurance purposes, and delinquent accounts can be designated by the computer. The charge for these additional services may be anywhere from zero to \$2.00 per statement.

This service is more expensive than any of the other systems mentioned. If you mail 1,000 statements per month, the cost per statement including postage will be 24.5 cents if typewritten, 18.6 cents if photocopied, and 36.0 cents if computerized without extras.¹⁷ The physician must decide if the cost, the conversion of his old system to new forms, and the effort required to feed information to the computer is justified. You need to revitalize your billing system if your aides cannot get your statements out on time, but not if you know exactly what your accounts receivable are nor if your collection ratio is more than 95 percent.

If collection is not achieved after four billings, a reliable collection agency can be helpful. This should be a local agency and should provide the doctor with a list of other physicians it serves. It should also be willing to answer inquiries regarding suspicious characters who are likely to visit each new dermatologist's office with no intention of paying their bills. The physician should not accept an arrangement of advance payment. Status records should be expected on request. The commission charged should be a fair and realistic one, and the methods used ethical and professional.

CONCLUSION

This sketch of office management is intended to show that an efficient, well run office can be achieved provided the physician receives some training in this area. The best preparation would be informal seminars on office management, which should be part of every training program in dermatology. The benefits reaped from the time and effort spent are many: efficiency, order instead of chaos, and lower overhead resulting in a higher net earning and ultimately stabilizing the increase in fees for the patient.

Ironically, the physician so trained may soon find that he has neither the time nor the physical energy to practice medicine and also implement all the information acquired. In that event, I can only suggest that you appeal to your wife. If you will invite her to participate in discussions of this type, the potential is limitless. To name a few: keeping the books and an accurate, undelated deposited slip; lending assistance during the vacation times or unexpected illnesses of regular staff members; breaking in new office personnel; keeping an eye on the appearance, attitudes, and problems of your staff; and paying attention to the comfort and convenience of your patients. In addition to having someone you can count on in time of crisis, there is no possible way in which one can possibly measure the personal satisfaction of a successful marital team effort.

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A PRACTITIONER'S THOUGHTS ON OUR MEDICINE

A Challenge for Local Medical Society Leadership

Julian F. Keith, M.D.

OVER the past few years—indeed, in the past year—we have witnessed marked changes, some almost imperceptible, in the mode of American medical practice. Some of these changes began as a result of sincere efforts on the part of the profession to improve the delivery of care, to raise the quality of care, and to contain cost. However, the majority of you realize that most of the motivation for changes within the profession have come as a result of pressures and forces operating from outside our professional structure.

At this moment it seems that we can expect some form of medical bill to be passed by Congress—probably somewhat more than is now contained in H. R. I and certainly less than that proposed by organized labor and Senator Kennedy. Whatever legislation is passed will probably be buttressed by the Bennett Amendment for Professional Service Review Organizations.

Those of you who think about the real underlying problems of medicine—both its “in house” problems and those that relate to medicine’s role in today’s society—cannot help but despair at the superficiality of most political thought and action in the field. The real problems seem to be either sadly misunderstood or tragically ignored.

In an age when there is a real need to restore human warmth and personal concern to the motivations and ministrations of medical men, the trend seems to be running in the opposite direction. Today you are called the “provider,” the patient is a “consumer,” and the profession is an “industry.” We talk

in meetings of the “rendering” and the “delivery” of medical care. The elemental unit of medical service—a personal, intimate physician-patient relationship—is dealt with as though it is something to be fabricated like a bar of soap, a can of soup—to be produced, packaged, transported, stored, casted, priced, and delivered. All medical reform is contemplated by the planners in terms of economics and industry.

The dean of one of our leading medical schools contemplates converting a much deplored “cottage industry” into a functioning, productive industry with components such as automated testing, computerization, and mass production techniques.

If leaders in our profession think of the doctors of tomorrow in these terms, it cannot be surprising that Congress approaches the traditional body of medical practice as an “obsolete cottage-industry,” an amorphous non-system, an anachronism that must at any cost be rationalized and reconstructed along conventional industrial and commercial lines.

All of this comes at the very time that our industrial system is afflicted with soaring costs and prices, serious unemployment, a growing shoddiness of product, and a deterioration in pride of workmanship and integrity of performance. Is this the model that American medicine should emulate?

Many of our liberal thinkers who deplored the soulless centralization, and the phony and impersonal materialism of our industrial society are now condemning medicine for resisting “reforms” which would remake medicine in the image of the industrial civilization whose main features they so much deplore.

Out of all of this two questions arise: (1) Will the American physician be allowed to survive as a professional person? (2) Can the patient look for-

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ward to a one-to-one relationship with a physician who is immediately and primarily concerned with his, the patient's, welfare?

It is time—and many doctors recognize this—to mount something more imaginative and audacious than the usual rear-guard action if medical professionalism is to survive.

I believe we are at a time when we can recognize a multifaceted movement within the profession that can adopt the good of new methods and concepts, yet retain the personal warmth that has marked the present system at its best.

There is a movement under way to reform a medical educational system that has ignored the social and behavioral ills of patients, while concentrating exclusively on their physical ills. We see this reform expressed in the proliferation of departments of community medicine, in the new departments of family practice, and in a new interest among students in general service rather than super-specialization.

We are also witnessing a belated response on the part of the profession to the dangers confronting it in the acceptance of a working responsibility for the quality as well as the proficiency of its performance. Our tissue committees and CPC's have been supplemented by utilization committees, peer review committees, record committees, and other professional monitoring programs. Beyond these programs—primarily hospital based—the profession is perfecting the organizing of the "Foundation for Medical Care" as evidence of its determination to assure the integrity and the essential benefits of individual practice for the patient.

The present administration seems to have made "a judgment that fee-for-service practice," either in solo or group practice, is obsolete.

The profession—and to make it more personal, our own society—has a precious, and possibly a very limited, opportunity to look into the relative advantages of various forms of medical payment and of group and solo practice in various community settings. We have an opportunity to redress the imbalance in medical education that has produced a plethora of specialized problem-solvers and a scarcity of generalized people-doctors. We have an op-

portunity to redress the imbalance of medical research that finds less than 2 percent of the research dollar devoted to research in patient care or the psychologic and sociologic aspects of medical practice.

Our local society, I believe, is moving in the right direction through a special committee that will develop a plan for a foundation for medical care and peer review, supplemented by a certified hospital admissions procedure program. This, to me, is a common-sense approach to the HMO concept, stressing function and product rather than a concentration of personnel and facilities in a central physical plant.

It is recognized that the majority of our profession resists the idea of being forced into closed-panel groups, and this is equally true of many patients. The individual practitioner still has formidable reasons for surviving. I believe you will find that his participation in the disciplines and the commitments of the foundation of medical care will enable him to practice in an equivalent frame of discipline to that which the group practitioner serves his patients.

Through strong contractual bonds between the physician and service organizations of their choice or creation, embracing an earnest pervasive "peer review" program, individual practitioner may earn for himself not only the right and assurance of survival, but also the prospect of competing successfully in a stabilized relationship with the public he serves.

I believe that our society should move immediately—and quickly—toward the development of a medical foundation for medical care and peer review. We must do this on a community-wide basis, as a whole medical society, not fragmented into the town-and-gown dichotomy or into the racial bias of black and white.

In establishing such a foundation, it is my earnest hope that we will do so more from a desire to serve this community and our patients, than as just an effort to "save our own hides." The issues facing us are complex, not simplistic, as a recent newspaper editorial or a local politician would have the public believe, and the solutions will be elusive. I have faith that organized as a society, we will do that which is good for our profession, our patients, and this community.

The superstitious and contemptible custom of obliging women to keep to the house [after childbirth] till they go to church, is a very common cause of catching cold. All churches are damp, and most of them cold; consequently they are the very worst places to which a woman can go to make her first visit, after having been confined in a warm room for a month. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 367.*

Editorials

THE "ALTERNATE" DELEGATES

The authority of the North Carolina Medical Society rests in its House of Delegates. In its annual session, the House elects the Society's officers, its delegates to other organizations, and representatives to all major boards and committees; establishes Society policy; adopts a half-million dollar budget; changes and updates the Constitution and By-Laws; and reviews, for approval or change, all actions taken by the Executive Council in the interim between House sessions. Truly, here is where the power of organized medicine in this state lies!

Consequently, it behooves every component society to be as fully and as competently represented in this legislative body as possible. In accord with our By-Laws, every component society, including the student groups, is entitled to one delegate per twenty-five (25) members (or major fraction thereof). Customarily, an equal number of alternate delegates is also elected.

Unfortunately, few alternate delegates attend the sessions of the House of Delegates, unless they are substituting for an absent delegate. It should be made clear that the attendance in the House of Delegates of *all* alternate delegates is welcomed and encouraged. To facilitate this, special and privileged seating in the House is provided for them. Certainly, the experience of closely following the activities of the House is ideal training for the later assumption of the responsibilities of a voting delegate.

Alternate delegates *can* comprise a valuable component of a society's delegation, even without the privilege of voting. They have the opportunity, equal to that of the delegate, to become informed on existing issues and to decide their position on these issues; they can contribute valuable input into the decisions made by their society's caucuses; and they return to their community capable of informing their society's membership on the problems of the day.

Some county societies already have the policy of advancing experienced and knowledgeable alternate delegates, after a stated period of service, to the office of delegate. This is heartily commended and recommended. Quite obviously, statewide adoption of this policy would result in a much better informed and more experienced House than is now possible.

We are soon approaching the season for electing those who are to represent us in our House of Delegates next May. It is sincerely hoped that every ef-

fort will be made to develop the philosophy that alternate delegates have a responsibility to attend the sessions of the House of Delegates and that they rightfully have the expectation of subsequently being promoted to position of delegate. Planning now to elect a full slate of competent alternate delegates with these understandings will return valuable benefits to all of us next May—and in the years to come.

JAMES E. DAVIS, M.D.
Speaker

IS LESS REALLY MORE?

It seems paradoxical to find trends in medical education toward shortening the time in school when medicine grows more complex all the time. The way in which this feat is supposed to be accomplished is by having the student specialize earlier, and by lessening the time he spends in basic sciences. There are many reasons advanced justifying this position. The demand for delivery of health care to consumers—it used to be a demand for doctors to treat patients—is a major argument, but one which is not going unchallenged either by medical men or nonphysicians working in the health field. Another is the increasingly annoying demand for relevance, with the demander usually being the one who will define relevance, even if he is not especially experienced or insightful. Most practicing physicians will be able to sympathize with these points of view to some extent. Many would welcome help in their own practices, and most will recall things in their medical education which seemed useless when they were taking them and useless when they think back. Yet most physicians, if they can spare the time to think about the problems of medical education, must feel some uneasiness at what is happening in many medical schools. A lot of the points that were going to go into this editorial are made, probably a lot better, in two articles appearing simultaneously as the editorial was being drafted.

Dr. George Engel, Rochester's thoughtful psychiatrist-internist, is afraid that current fashions in medical education will produce "a generation of physicians and teachers . . . that does not even know how ignorant it is."¹ He points out that a good general education, including a good general medical education, takes time. An old expression dealing with such matters is half-baked, and if Dr. Engel were more slangy

he might well apply it to the people he is afraid we are going to see coming from our medical schools.

In a similar vein, Dr. Charles Poser,² Vermont's neurology chairman, feels the strong surge of anti-intellectualism that is abroad in our medical schools, and wonders if clinical scholarship is not going to suffer greatly in the near future. As he says, the supposedly outmoded curricula of U.S. medical schools since the post-Flexnerian reform period have produced the great men of U.S. medicine during that time. Despite what some sociologically oriented critics might say of U.S. medicine, physicians around the world acknowledge its supremacy since World War II, so we must have been doing something right. To dismember those curricula now with glee, on the assumption that change is of necessity good, may well replace something of proved value with a sterile, trade-school orientation and the yielding of our creativity to some other country with more insight into the nature of scientific progress.

Dr. Poser expresses concern at a recent proposal suggesting a common core of courses for medical students and allied health professionals. He might have gone further and wondered if within that proposal there is not one of the intrinsic assumptions which are affecting our educational process at all levels, and which may not be valid. That is the egalitarian view that people are essentially the same, and given similar opportunities will prosper in roughly equal fashion. It is almost dangerous to oppose that view, and cries of "elitist" or "aristocrat" are apt to come forth from the currently large egalitarian group. Yet everyone will admit that in athletics there is an obvious elite—people with various physical endowments can be separated into the fastest runner or swimmer by objective measures. The lack of such reliable measurements in intellectual endeavor does not mean that there is no natural intellectual elite. As things stand today, at the risk of being elitist, snobbish or whatever epithet suits, physicians are for the most part an intellectual elite in the medical

field. Which is not to say that very bright people are not in all the other fields as well; it is just that the average really bright person wanting a health career thinks most usually of being a physician. Now these bright people are hearing other things about how to use their intellect, most of them pragmatically directed toward treating sick people in an evolving system of medical practice in which they will join with other health workers in meeting vast deficits in medical care postulated by various agencies, public and private. Those who would like to follow the urgings of their intellect toward research and medical school teaching are going to face some measure of disapproval, from their peers and from the increasing numbers of non-physician commentators on the medical scene.

All this is rather sad, in light of the momentum U.S. medicine has built up in the last 25 years. But it may be that anti-intellectualism will not be denied. It might be drawing too harsh a comparison to wonder if the trend will go as far as it has in mainland China; descriptions of the situation there having furnished the original impetus to draft this editorial. Full development of revolutionary fervor, constant attention by doctors to political and social matters, the weighing of all medical activities in the political, social and economic balance, and the complete subservience of medicine to national aims are perhaps seen in their purest form in contemporary China; Bismarck would have been fascinated to see his ideas on social medicine reach that peak of development. It is almost impossible to think that we will go that far; but the trends are similar, and the Chinese situation affords insight into what happens when some present trends are carried to their logical conclusion. An extreme view? Perhaps, but extremes are not impossible of attainment.

REFERENCES

1. Engel GL: The implications of changes in medical education. *Hosp Prac* 6:109-116, 1971.
2. Poser CM: Medical education in the 1970's: The demise of clinical scholarship. *Mod Med* 39:54-64, 1971.

Though the management of women in child-bed has been practiced as an employment since the earliest accounts of time; yet it is still in most countries on a very bad footing. Few women think of following this employment till they are reduced to the necessity of doing it for bread. Hence not one in a hundred of them have any education, or proper knowledge of their business. Most women in child-bed require to be managed with skill and attention, and they are often hurt by the superstitious prejudices of ignorant and officious midwives. The mischief done in this way is much greater than is generally imagined; most of which might be prevented by allowing no woman to practice midwifery but such as are properly qualified. Were due attention paid to this, it would be the means of saving many lives. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 363.*

Correspondence

HEALTH CARE ABROAD

Dr. Charles Styron, immediate past president of the Society, suggested to Dr. Anlyan that the membership would enjoy, and profit by, his comments on medical practice in other countries. His kind response follows.

To the Editor:

I am pleased to respond to Dr. Styron's request for a brief informal report of my recent impressions of health care in some other countries. A small group of us from the U.S. were invited to attend a three day Macy Foundation Conference in The Hague (June 19 to 22); there was representation from the following nations: Israel, New Zealand, Norway, Yugoslavia, Sweden, England, France, Spain, Japan, India, and Denmark. The theme of the conference was "National Health Services: Their Impact on Medical Education and Their Role In Prevention." Before and after The Hague a small group of us visited in London and Stockholm to gain a deep insight into their health care systems and the impact thereof on health education programs.

The following are my personal conclusions:

1. We should not import lock, stock, and barrel to this country any other nation's health care system; however there are some good and bad lessons to be learned.

2. Our health care system is a good one but there is plenty of room for improvement. We don't need a total revamping but instead we should seek to improve what we have.

3. Whereas in Great Britain and in Sweden they have eliminated some of the low points of our health care system, they have generated new problems that we do not want—namely: There is a lack of incentive for physicians to work hard. In Sweden the work week for a physician is approximately fifty hours; his tax rate for that income is 65 per cent and any additional funds generated are taxable at the 85 per cent rate. Hence, as two very prominent Americans in residence noted, "If you get sick (short of a bonafide emergency) on Saturdays or Sundays or between mid-June and the end of September—forget it!" It is not unusual to have to wait 4 years for an elective herniorrhaphy. The same complaint about "queueing

up" was heard from consumers in London. Complaints about the impersonal nature of care varied.

4. The experience in Israel would indicate that you cannot solve the problems of geographic distribution by saturation. They have one physician for every three hundred and fifty people compared to the U.S. average (in 1970) of 699 and in North Carolina of 944. Yet the physicians in Israel are clustered in Jerusalem, Tel Aviv and Hafia. They too are scratching their heads about how to get "docs for the boondocks" (the Negev desert). Hence in North Carolina we are not going to solve our geographic maldistribution problem merely by increasing the output of physicians and health personnel. There needs to be a concomitant correction of the specialty maldistribution and some organization of the health delivery system.

5. In Norway, 16 per cent of the gross National Product is spent on health and social welfare. "Comprehensive" health care appears to be a bottomless pit to the types of services that are needed and demanded. We need strict definition of what various financing mechanisms should provide in "comprehensiveness" and what is left to the individual consumer.

6. In Great Britain the maldistribution among medical specialties is controlled centrally by the number of residencies (registrars positions) that are funded; the number of specialist positions (consultants) available is a major determinant in evaluating the number of residency slots. The balance between service needs of hospitals and educational opportunities is made up of house officers who come from foreign countries and who have little chance of ultimately obtaining a consultant position.

It is my fond hope that in the U.S. we can avoid having the federal government determine the number of specialists and generalists in each field. The private sector under the aegis of the new Liaison Committee on Graduate Medical Education (co-sponsored by the American Medical Association, the Association of American Medical Colleges, the American Board of Medical Specialties, the Council of Medical Specialty societies, and the American Hospital Association) should address itself to this problem giving each specialty group the opportunity for self-study; the point of departure should be

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We're also striving to deliver health service more efficiently, by working with regional planning programs to avoid or minimize hospital cost increases. And by encouraging everyone to practice preventive medicine through health education programs.

To provide all these services, we've grown to 11 central and 22 regional offices, all across North Carolina, with almost 1,000 carefully trained and experienced people working to serve your health care needs.

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trained service representatives who call on hospitals, doctors, and other providers to assist them in submitting your claims for payment. All experts, ready to be of service when needed in handling your hospital or doctor bill.

All of these things—our Subscriber Service Division, our regional offices throughout the State, our local representatives who work with hospitals and doctors, our health education efforts, and all the rest, add up to just one thing: Better Service to you, our subscriber. It's what Blue Cross and Blue Shield stand for. It's why we've been in business for 39 years.



As North Carolina has grown and changed, so have we. Our ideas are always changing, always expanding. But one thing hasn't changed since our beginning. We still operate on the service benefit principle. It's the guiding objective on which our business was founded. We're not a health insurance company—we're a health service plan. One of 74 such Blue Cross and Blue Shield Plans in the United States with a combined membership of over 75 million persons. And still growing every year.



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"what does the nation need." With the advent of Medicare and Medicaid the federal government now has the fiscal leverage to influence the specialty distribution if we abdicate our prerogative as a profession to do it in the private sector.

Obviously there are many other interesting comparative facets of health care between us and the

northern European nations to be discussed on some future occasion. The proceedings of the Macy Conference will be published in detail in the near future.

WILLIAM G. ANLYAN, M.D.
Vice President for Health Affairs

Duke University Medical Center
Durham

Bulletin Board

NEW MEMBERS of the State Society

Davis, Philip Coleman, MD, ObG, 501 Kimberly Ave., Asheville 28804
Errico, James Melton, MD, Oph, 319 Westwood Ave., High Point 27262
Evans, David Arnold, MD, ObG, 1303 Dove St., Monroe 28110
Fahl, James Cox, MD, S, 24 Second Ave., NE, Hickory 28601
Giles, John Henry, MD, S, 207 S. Sterling St., Morganton 28655
Hamby, James Lawrence, MD, U, 321-E Mulberry St., Le-noir 28645
Henderson, John Arthur, MD, S, Rt. 5, Rathfarnham Rd., Asheville 28803
Hodgson, Eugene Welch, MD, GP, P. O. Drawer 338, Aurora
Hutchins, Kenneth Raymond, MD, U, 1350 S. Kings Dr., Charlotte 28207
Linney, George E., Jr., MD, Pd, 1350 Kings Dr., Charlotte 27207
Lynch, Wilson Locke, MD, 309 S. York St., Gastonia 28052
May, Robert Drysdale, MD, PH, 1825 W. Sixth St., Greenville 27834
Moncla, Alfred Marie, MD, ObG, 608 W. Main St., Elizabeth City 27909
Senter, Richard Gordon, MD, I, 1350 Kings Dr., Charlotte 28207
Thayer, Edna Calderwood, MD, (Renewal) 5205 High Point Rd., Greensboro 27407
Waldenberg, Leopold Mark, MD, S, 3801 Computer Dr., Raleigh 27609

WHAT? WHEN? WHERE?

In Continuing Education
October, 1972

I. Current Events in North Carolina Oct. 2-6

"Development of Leadership Skills"
Place: School of Nursing, UNC, Chapel Hill
Tuition Fee: \$100
For Information: Bonnie K. Hensley, Asst. Professor, UNC

School of Nursing, Carrington Hall, Chapel Hill, N. C. 27514

Oct. 6

Forsyth County Heart Association Symposium
"Left Ventricular Outflow Obstructive Disease"
"The Detection of Cardiovascular Disease of Children in Office Practice" Speaker—Mary Allen Engle, M.D.
"Myocardial Revascularization—The Cleveland Clinic Experience"
"The Surgical Mission of Myocardial Revascularization" Speaker—Donald B. Effler, M.D.
"Pathological Findings in Pre-Hospital Deaths Due to Coronary Atherosclerosis"
"The Geographic Pathology of Coronary Atherosclerosis" Speaker—Robert Foster Scott, M.D.
Place: Holiday Inn West, Winston-Salem
Sponsored by: Forsyth County Heart Association
For Information: Mrs. Katherine I. Cox, Executive Director
Forsyth County Heart Association, 2046 Queen Street, Winston-Salem, 27103

Oct. 6-7

New Frontiers in Respiration
Place: Downtown Holiday Inn, Raleigh
Sponsored by: North Carolina Thoracic Society, North Carolina Tuberculosis & Respiratory Disease Association, North Carolina Academy of Family Physicians, and Duke University Department of Postgraduate Medical Education
Registration Fee: (Includes tuition, one luncheon, one dinner and social hour)
Physicians \$30
Paramedical Personnel \$20
For Information: Samuel M. McMahon, M.D., Course Director, North Carolina Thoracic Society, P. O. Box 127, Raleigh, 27602

Oct. 12-13

Annual Alumni Meeting, Distinguished Alumni Lectures, Scientific Session
Place: Babcock Auditorium, Bowman Gray School of Medicine, Winston-Salem
For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem, 27103

Oct. 13-14

School of Pharmacy Homecoming Weekend
October 14—9:45 "Legislation Affecting Pharmacists and Pharmaceuticals." Honorable L. H. Fountain, U. S. House of Representatives

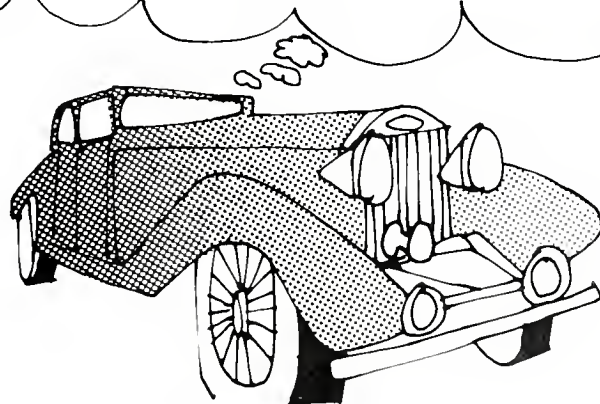
YOU KNOW... I REALLY HATE TO PUT UP ALL THAT CASH AGAIN FOR A NEW CAR. I COULD INVEST THAT MONEY AT A PROFIT. MAYBE I SHOULD LEASE MY NEXT CAR. I THINK I'LL DROP EQUITABLE LEASING CORPORATION A LINE FOR SOME FURTHER INFORMATION ABOUT THIS SORT OF THING. I HAVE THEIR FINANCIAL CONSULTANT'S CARD HERE SOMEWHERE IN THE GLOVE COMPARTMENT...

AH, HERE IT IS.

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AND MAYBE WHILE THEY'RE AT IT THEY CAN SHOW ME THE ADVANTAGES OF LEASING EQUIPMENT FOR MY OFFICE.

LET'S SEE... BOB'S PHONE NUMBER IS
(704) 253-9831



10:45 "The Patient as a Person," Chaplain Fred W. Reid, Jr., Assistant Professor of Psychiatry, UNC School of Medicine
 Place: School of Pharmacy, UNC Chapel Hill
 Sponsored by: UNC School of Pharmacy and N. C. Pharmaceutical Association
 For Information: Mr. Claude Paoloni, Director of Continuing Education, UNC School of Pharmacy, Chapel Hill 27514

Oct. 16-17

Joint Meeting of N. C.-S. C. Societies of Ophthalmology and Otolaryngology
 Place: Blockade Runner Motor Hotel, Wrightsville Beach
 For Information: Banks Anderson, Jr., M.D., N. C. Society of Ophthalmology and Otolaryngology, Duke University Medical Center, Durham 27710

Oct. 25-27

Fourth Annual Radiology and Nuclear Medicine Postgraduate Course
 Place: Duke University, Durham
 Presented by: Department of Radiology at the Duke University Medical Center
 For Information: Robert McLelland, M.D., Department of Radiology, Box 3808, Duke University Medical Center, Durham 27710

Oct. 26

Raleigh Academy of Medicine 24th Annual Clinical Symposium
 "Clinical Pharmacology, Toxicology, and Drug Interaction"
 Place: Sir Walter Hotel, Raleigh
 For Information: B. B. Ferdon, M.D., Program Chairman, Raleigh Academy of Medicine, 119 N. Boylan Avenue, Raleigh 27603

Nov. 16-17

Annual School of Medicine Symposium
 Place: School of Medicine, UNC, Chapel Hill
 For Information: School of Medicine, UNC, Chapel Hill 27514

Nov. 17-18

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and The North Carolina Pediatric Society
 Place: The Carolina, Pinehurst
 For Information: Mrs. John McLain, 3209 Rugby Road, Durham 27707

II. Coming Events in North Carolina

Dec. 1-2

Annual NCSIM-ACP Joint Meeting
 Place: Red Carpet Inn, Charlotte
 Sponsors: The North Carolina Society of Internal Medicine and American College of Physicians
 For Information: Dr. E. Tom Marshburn, 3008 Oleander Drive, Wilmington

Dec. 8-9

Second Annual Reynolds Seminar in Medicine, "Myocardial Infarction, 1972"
 Place: Babcock Auditorium, Bowman Gray School of Medicine, Winston-Salem
 For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

Jan., 1973

Ophthalmology Seminar
 Place: School of Medicine, UNC, Chapel Hill
 For Information: UNC School of Medicine, Chapel Hill 27514

Jan. 26-27, 1973

Third Annual Surgical Symposium
 "Surgical Emergencies"
 Place: Babcock Auditorium, Bowman Gray School of Medicine, Winston-Salem
 For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

III. Out of State (through January, 1973)

Oct. 4

"Alcoholism in Medical Practice"
 Place: Baruch Auditorium, Egyptian Building, Medical College of Virginia
 Sponsored by: The Departments of Psychiatry and Family Practice in cooperation with the Department of Continuing Education, School of Medicine, Medical College of Virginia
 For Information: Dr. James L. Mathis, Professor and Chairman, Department of Psychiatry, Box 907, Medical College of Virginia, Richmond, Va. 23219

Oct. 12-13

Symposium on Infection Control Within the Hospital
 Place: Francis Marion Hotel, Charleston, South Carolina
 Sponsored by A.O.R.N., Charleston Chapter I
 For Information: Mrs. Elizabeth I. Marcil, R.N., President, Association of Operating Room Nurses, Charleston Chapter I, P. O. Box 272, Mt. Pleasant, S. C. 29464

Oct. 12-14

"Surgery in Rheumatoid Arthritis"
 Place: Atlanta, Georgia
 Sponsored by: American Academy of Orthopaedic Surgeons
 For Information: F. James Funk, Jr., M.D., 1938 Peachtree Road, N.W., Atlanta, Ga. 30309

Oct. 13-15

Surgical Treatment of Rheumatoid Arthritis
 Place: Marriott Motor Hotel, Cain & Courtland Sts., N.E., Atlanta, Ga.
 Sponsored by: American Academy of Orthopaedic Surgeons and Emory University School of Medicine
 Fee: \$150
 For Information: American Academy of Orthopaedic Surgeons, 430 N. Michigan Ave., Chicago, Ill. 60611

Oct. 14

Cancer of the Breast
 Place: Vanderbilt University School of Medicine
 Sponsored by: Vanderbilt University School of Medicine, Division of Continuing Education, Tennessee Mid-South Cancer Education, Tennessee Chapter of the American Cancer Society and Tennessee Academy of Family Physicians
 Fee: \$15
 For Information: Vanderbilt University School of Medicine, Division of Continuing Education, Tennessee Mid-South Cancer Education, 110 21st Ave. S., Nashville, Tenn. 37203

Oct. 16-17

Tennessee Valley Medical Assembly
 Place: Read House, Chattanooga, Tenn.
 For Information: Guy M. Francis, M.D., Chairman, 960 East Third Street, Chattanooga, Tenn. 37403

Oct. 16-18

"Neuromuscular Problems of Childhood"
 Place: Charlottesville, Va.
 Sponsor: American Academy of Orthopaedic Surgeons
 For Information: Warren G. Stamp, M.D. and Wilton H.

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Bunch, M.D., University of Virginia Hospital, Charlottesville, Va. 22901

Oct. 18

Symposium on The Management of Diabetes

Place: Baruch Auditorium, Egyptian Building, Medical College of Va.

Sponsored by: Division of Endocrinology and Metabolism in cooperation with the Department of Continuing Education, School of Medicine, Medical College of Va.

For Information: Dr. H. St. George Tucker, Professor and Chairman, Division of Endocrinology and Metabolism, Medical College of Virginia, Box 111, MCV, Richmond, Va. 23219

Oct. 20-21

Intravascular Coagulation in Pregnancy

Place: Vanderbilt University School of Medicine, Affiliated Hospitals (St. Thomas, General & Vanderbilt Hospitals), Nashville, Tenn. 37203

Sponsored by: Division of Continuing Education, VUSM, and Tennessee Mid-South RMP

For Information: Vanderbilt University School of Medicine, Division of Continuing Education, 110 21st Ave., S, Nashville, Tenn. 37203

Oct. 25-27

Contemporary Concepts of Anesthesia for Family Physicians

Place: University of Tennessee

For Information: University of Tennessee, College of Medicine, 800 Madison Avenue, Memphis, Tenn. 38103

Oct. 26-28

Principles of Cardiac Arrhythmias

Place: The Greenbrier, White Sulphur Springs, W. Va.

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Registration fee: \$100 members; \$150 non-members

For Information: Miss Mary Anne McInerney, Director, Department of Continuing Education Programs, American College of Cardiology, 9650 Rockville Pike, Bethesda, Md. 20014

Oct. 27-28

Tennessee Regional Meeting, American College of Physicians

Place: Sheraton Motor Inn, Memphis, Tenn.

For Information: Hall S. Tackett, M.D., 910 Madison Avenue, Memphis, Tenn. 38103

Nov. 1-3

Competitive Protein Binding and Radioimmuno Assay in Clinical Chemistry, Seminar Series

Place: Department of Continuing Education, School of Medicine, Medical College of Va.

Sponsored by: Department of Pathology

For Information: Department of Continuing Education, Health Sciences Division, Box 91, Medical College of Virginia, Richmond, Va. 23219

Nov. 4

Georgia Regional Meeting, American College of Physicians

Place: Grady Hospital, Atlanta, Georgia

For Information: Edwin C. Evans, M.D., 340 Boulevard, N.E., Atlanta, Ga. 30312

Nov. 8-10

Pediatrics

Place: University of Tennessee College of Medicine

For Information: University of Tennessee College of Medicine, 800 Madison Avenue, Memphis, Tenn. 38103

Nov. 10-11

Emergency Medical Services

Place: Vanderbilt University School of Medicine, Nashville, Tenn. 37203

Co-sponsor: Tennessee Mid-South RMP

For Information: Vanderbilt University School of Medicine, Division of Continuing Education, 110 21st Ave., S, Nashville, Tenn. 37203

Nov. 30-Dec. 1

South-Wide Symposium on Human Nematode Intestinal Parasites

Place: Atlanta, Ga.

Sponsored by: University of S. C.

For Information: James W. Follette, Project Assistant, Malnutrition and Parasite Project, 002 Maxcy College, University of S. C., Columbia, S. C. 29208

Dec. 1

Ware Residents Program

Place: School of Medicine, Medical College of Va.

For Information: Department of Continuing Education, Health Sciences Division, Box 91, Medical College of Virginia, Richmond, Va. 23219

Dec. 8 9

Current Concepts in the Treatment of Infectious Diseases

Place: Medical University of S. C.

Co-sponsor: Center for Disease Control, Atlanta

For Information: Medical University of S. C., 80 Barre St., Charleston, S. C. 29401

Dec. 14-15

Otolaryngology for the Family Physicians

Place: University of Tennessee College of Medicine

For Information: U. T. College of Medicine, 800 Madison Ave., Memphis, Tenn. 38103

Literary Hemorrhoids

Mrs. S.R., 47, high school English teacher. A history of anorectal pain and burning of several years' duration. On and off weight reducing diets, the insufficient bulk of which has aggravated a chronic constipation problem. Subsequent straining at stool has precipitated an acute episode of internal-external hemorrhoids.



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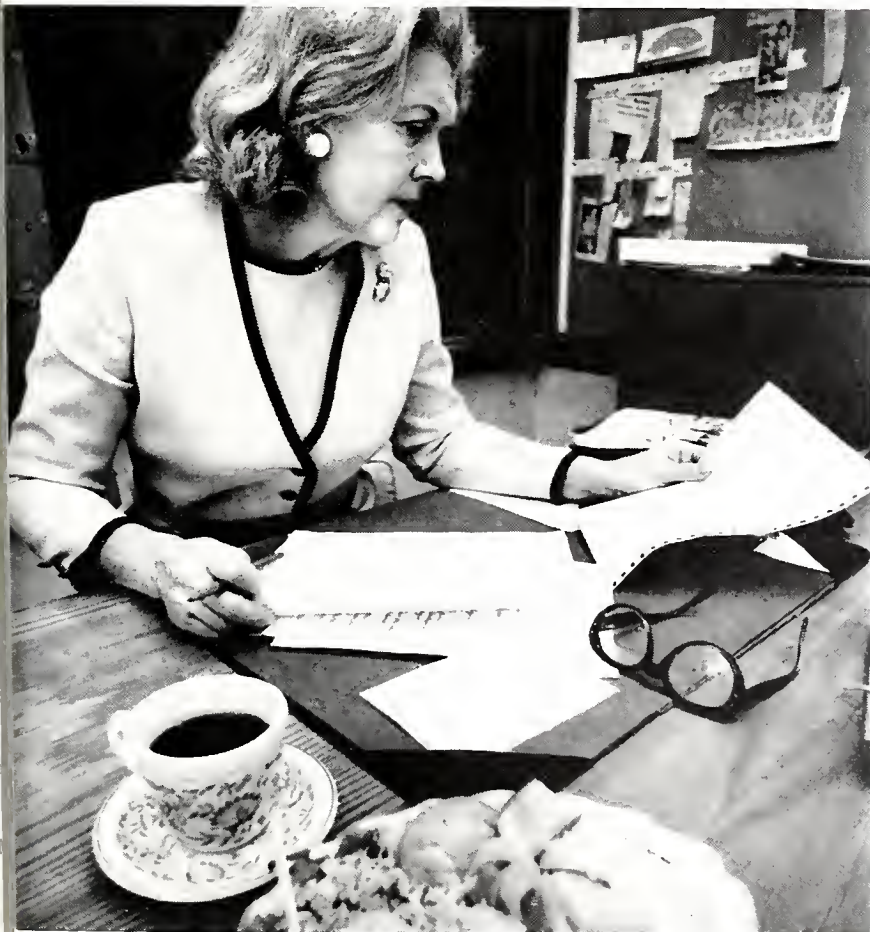
Dosage and Administration Anusol-HC: One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol: One suppository in the morning, one at bedtime, and one immediately following each evacuation.

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Dec. 19

Course in Oral Surgery-Surgical Orthodontics
Place: Vanderbilt University School of Medicine
Co-sponsor: Tennessee Mid-South RMP
Fee: \$50

For Information: Vanderbilt University School of Medicine,
Division of Continuing Education, 110 21st Ave., S.,
Nashville, Tenn. 37203

Jan. 5

Medicine & Religion Symposium

Place: Medical College of Ga.

For Information: Medical College of Georgia, 1459 Gwinnett St., Augusta, Ga. 30902

Jan. 8-10

3 Days of Liver Disease

Place: Royal Coach Motel, Atlanta, Ga.

Co-sponsor: Emory University

Fee: \$80 ACP members, FACP, residents, & resident fellows; \$40 Assoc.; \$125 nonmembers

For Information: American College of Physicians, 4200 Pine St., Philadelphia, Pa. 19104

Jan. 8-11

The Alton D. Bradshar Postgraduate Course in Head and Neck Anatomy

Place: School of Medicine, Medical College of Va.

Sponsored by: Department of Anatomy

For Information: Department of Continuing Education,
Health Sciences Division, Box 91, Medical College of
Virginia, Richmond, Va. 23219

Jan. 14

Place: Jackson-Madison County Gen. Hospital

Co-sponsor: University of Tennessee College of Medicine

For Information: Jackson-Madison County Gen. Hospital,
708 W. Forest, Jackson, Tenn. 38301

Jan. 25-26

Clinical Psychiatry

Place: Medical College of Ga.

Fee: \$50

For Information: Medical College of Georgia, 1459 Gwinnett St., Augusta, Ga. 30902

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

Dr. Robert L. Ney has been named chairman of the University of North Carolina Medical School's Department of Medicine, it was announced recently.

The announcement was made by Dr. Christopher C. Fordham III, dean of the School of Medicine.

Dr. Ney succeeds Dr. Louis G. Welt, chairman of the UNC Department of Medicine since 1965. Dr. Welt resigned the post effective July 1 to become chairman of the Department of Medicine at Yale University School of Medicine.

Dr. Ney joined the UNC faculty in 1967 as an associate professor of medicine and in 1970 became a professor of medicine and physiology.

Dean Fordham said of Dr. Ney's appointment,

"We are delighted to have Dr. Ney as our new chairman of Medicine. He is an outstanding physician, teacher and investigator from within our own faculty, and I fully expect the department to continue its outstanding progress with his leadership."

A graduate of Harvard University and Cornell University where he received the M.D. degree in 1958, Dr. Ney is a noted endocrinologist and cancer researcher. He is author of some 50 scientific articles published in various scholarly journals and more than 30 abstracts. * * *

The University of North Carolina at Chapel Hill at the Orange Person-Chatham Mental Health Center (OPCMHC) have signed an agreement to jointly provide mental health care for young children.

The program, representing a collaborative effort between the University, OPCMHC and the Durham Technical Institute, will provide mental health consultation and training for teachers in nearly 20 day care centers in Orange, Person, and Chatham counties.

Dr. Lenore Behar of the UNC Child Development Institute and Department of Psychiatry and Dr. Paul Martin of OPCMHC will direct the new comprehensive program. Joining them in September as associate director was Merrill Runquist.

Funded as an eight-year project by a National Institute of Mental Health grant, the program will receive for the first year \$165,083 in federal money and \$20,000 in local matching funds from the UNC Department of Psychiatry and the Community Chest. * * *

Pediatricians at the University of North Carolina are testing a new vaccine to help prevent respiratory virus infection.

Dr. Floyd W. Denny and his associates in the UNC Department of Pediatrics will be testing the immune responses in children to a new live virus vaccine administered by drops into the nose.

Developed by the Institute for Allergy and Infectious Diseases, the vaccine is unique because it will not grow at the internal body temperature of the lungs. Instead, it grows at the cooler temperature in the nose and throat. Antibodies are produced to this infection, thereby preventing future, more severe infections in the lungs.

Previous studies at UNC suggest that the direct application of vaccines into the nasal passages may provide better protection against respiratory illnesses than vaccines inoculated by needle, Dr. Denny pointed out.

Dr. Denny will be working under a \$39,961 National Institutes of Health clinical evaluation grant. * * *

Dr. Robert A. Mueller, associate professor of anesthesiology, has been awarded a \$16,157 National Institutes of Health grant for research on "Sympathoadrenal Activity During Anesthesia."

Dr. Mueller will be developing and examining

techniques permitting an analysis of the activity of the sympathetic nervous system to be made on a single, small blood sample.

* * *

The UNC School of Public Health's Department of Biostatistics has received renewal of its Lipid Research Clinics Project from the National Heart and Lung Institute for the fiscal year 1972-73.

The new \$495,600 project budget represents more than a 100 percent increase in funds over last year.

The Lipid Research Clinics Project, now in its second year, is a seven to 10-year nationwide investigation into hyperlipoproteinemia, thought to be associated with heart disease.

The Department of Biostatistics serves as the project's Central Patient Registry and Coordinating Center, under the guidance of project co-investigators Drs. James E. Grizzle and O. Dale Williams.

* * *

Recent additions to the faculty of the UNC School of Medicine include the following:

Suzann K. Campbell, assistant professor, Division of Physical Therapy, has been a NIH Predoctoral Fellow in Neurophysiology at the University of Wisconsin for the past year. She received her physical therapy training at Wisconsin.

Stephen G. Chaney, assistant professor, Department of Biochemistry, is currently a Postdoctoral Fellow of American Cancer Society at the Washington University School of Medicine. A graduate of Duke University, he received his Ph.D. at the University of California at Los Angeles.

Bernard B. Harris, assistant professor, Department of Psychiatry, will also be director of the Western TEACCH Center. For the past two years he has been chief psychologist at the Blue Ridge Community Mental Health Center in Asheville. He holds degrees from Northern Illinois State University and the University of Wisconsin.

Gilbert F. Rieman, assistant professor, Department of Obstetrics and Gynecology, has been in private practice in Virginia since 1957. He received both his undergraduate and medical training at the University of Virginia.

William H. Friedman, assistant professor of psychology in the Department of Psychiatry, also will serve as a psychologist with the Student Health Service. Former director of the UNC-Greensboro Counseling Center, Friedman comes to Chapel Hill following a post as assistant director of research and administration for Indiana University's Student Health Service. He received his undergraduate training and M.A. degree from the University of Kansas and his Ph.D. from the University of Connecticut.

Axalla J. Hoole, assistant professor, Department of Medicine, is a former U.S. Air Force physician. A fellow at Emory University last year, he is a gradu-

A large, vertical advertisement for Ampicillin. The word "Ampicillin" is written in a very large, bold, white, sans-serif font against a solid black background. The letters are slightly shadowed, giving them a three-dimensional appearance. Below the word, in a smaller, white, sans-serif font, is the text "Beecham found it, named it, put it in your hands."

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ate of the University of the South and received his M.D. from the Medical College of South Carolina.

* * *

A "Problem Pregnancy Counseling and Resource Manual" for counselors from state, county and local social service and health agencies, religious groups, hospitals, colleges and other agencies handling problem pregnancies is now available.

The book, the first published in the United States which presents for counselors all the alternatives to problem pregnancies is being published in conjunction with the N. C. Workshop on Problem Pregnancy Counseling held Sept. 29-30 in Chapel Hill.

Orders for the 150-page manual can be made by writing the N. C. Workshop, Box 51, Carolina Union, University of North Carolina, Chapel Hill, N. C. 27514. The cost is \$1. Only a limited number are available.

* * *

1972 Medical Science Lecture Series

Focusing on "Tumor Viruses and Slow Viruses," this year's series will be held each Wednesday through Nov. 15 at 4 p.m. in the UNC School of Medicine's Clinic Auditorium.

* * *

Dr. Robert D. Langdell, professor of pathology at the UNC School of Medicine, was elected president

of the American Association of Blood Banks, Aug. 28, at the group's 25th annual meeting.

* * *

Dr. Edward G. McGavran, an international figure in public health education and dean emeritus of the University of North Carolina School of Public Health, died August 29 in Ontario, Canada following a heart attack.

As dean of the School of Public Health in Chapel Hill from 1947 until 1963, Dr. McGavran was responsible for the school's five-fold growth from a faculty of 14 to one of 70.

Following his retirement as dean, he accepted an assignment to serve in India as an adviser to the Indian government on many problems of public health administration. After this he returned to an active career in teaching in the School of Public Health, where he organized and taught continuing educational courses throughout North Carolina for workers of all disciplines in local health departments.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Dr. Delford L. Stickel, who has been chief of staff at the Durham VA Hospital since September of 1970, has been named to a new position of Associate Director (Medical) of Duke Hospital.

Stickel, a professor of surgery, heads up Duke's kidney transplant program and will continue in that role as well as continuing his teaching activities in the Department of Surgery.

Hospital Director Dr. Stuart Sessoms said Stickel "will focus on many areas of hospital administration that interface with the medical staff. He also will coordinate medical-legal activities and will be a valuable source of advice as we move into expansion of hospital facilities."

Stickel received his M.D. at Duke in 1953. He is a member of Phi Beta Kappa, Alpha Omega Alpha, was a Markle Scholar and held an NIH Career Development Award. Prior to becoming chief of staff at the VA, he was chief of surgical service there from 1966-68.

* * *

Duke has received a \$5.4 million federal grant to help support the first phase of developing a Comprehensive Cancer Center.

The initial phase of the program will include construction of a Basic Cancer Research Building and an Animal and Laboratory Isolation Facility.

Duke launched a drive to obtain matching funds for the federal grant with a benefit performance Aug. 29 of "Brian's Song," the story of Brian Piccolo, former Wake Forest and Chicago Bears football

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player, who died of cancer two years ago. His widow, Joy, came to Durham to participate in the program.

* * *

Dr. Nicholas Georgiade, professor of plastic and maxillofacial surgery, has received the senior classification award for the best original paper submitted during the year from the American Society of Plastic and Reconstructive Surgery.

Georgiade presented his paper and received a silver plaque and \$1,000 toward research at the society's annual meeting in Las Vegas.

The research study dealt with computerized analysis of enzyme level in determining and predicting the viability of preserved skin for grafts.

* * *

In a paper presented at the 30th International Congress on Alcoholism and Drug Dependence in Amsterdam, Dr. Demmie Mayfield, associate professor of psychiatry, noted the need to reduce the availability of firearms and to alter drinking behavior.

In his study of North Carolina penitentiary inmates and the influence of alcohol on their crimes, Mayfield said "we found the triad of familiarity (between assaulter and victim), guns and alcohol to be common ingredients in serious assaultive acts."

Three-fourths of the weapons used by the 307 subjects of the study were firearms, and more than half of those were small-caliber handguns.

* * *

The following promotions have been made:

To associate professor—Dr. G. Douglas Blenkarn, anesthesiology, and Dr. George W. Brumley Jr. and Dr. Rebecca H. Buckley, pediatrics.

To assistant professor—Dr. James H. Carter, psychiatry; Dr. Frederick R. Cobb, medicine; and Dr. Jerko Poklepovic, Dr. George M. McCord and Dr. Salutario Martinez, radiology.

* * *

New appointments include:

—Dr. Peter Brian Bennett, professor of anesthesiology, former head of the Pressure Physiology Section of the Royal Navy Physiological Laboratory in England.

—Dr. William J. Murray, associate professor of anesthesiology, who also held that rank in the Department of Pharmacology and Anesthesiology at the Upjohn Center for Clinical Pharmacology at the University of Michigan. He earned his M.D. at UNC in 1962.

—Dr. Robert E. McLelland, associate professor of radiology, former assistant clinical professor at Duke and before that director of radiology at Memorial Hospital in Danville, Va. He received his M.D. at the University of Cincinnati in 1944.

* * *

Dr. Gerald J. Musante, associate professor of psychiatry, conducted a seminar in July on "Social Re-

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habilitation and Control in Corrections," exploring possible closer relationships between universities and the N. C. Department of Corrections.

* * *

Dr. Eugene D. Day, professor of immunology and experimental surgery, is author of "Advanced Immunochemistry," published by Williams and Wilkins.

* * *

Dr. George G. Somjen, professor of physiology, presented papers on mercury poisoning and depressant drugs at the 5th International Pharmacology Congress in San Francisco.

* * *

Dr. James B. Wyngaarden, chairman of medicine, has been named to President Nixon's Science Advisory Committee for a term ending Dec. 31, 1975.

* * *

Dr. James A. Merchant, fellow in environmental medicine, spoke on "New Developments in Byssinosis Research" at the Carolinas Conference on Occupational Health in Clemson, S. C.

* * *

Dr. Jack D. Davidson, associate professor of radiology, presented a teaching session on "Digoxin Radioimmunoassay" at the annual meeting of the Society of Nuclear Medicine in Boston.

* * *

Dr. John Reckless, associate professor of psychia-

try, and Mrs. Alexandra Fauntleroy, who work together in the Masters and Johnson training method, met in Washington with six trained teams of the Reproductive Biology Foundation of St. Louis for an exchange of therapeutic problems.

Duke is one of four universities which have teams chosen by Masters and Johnson. The Duke team spent a month at the foundation in training with the methodology.

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

The North Carolina Regional Medical Program, which is beginning its 5th year of funding, has received \$2,493,236 from the Health Services and Mental Health Administration of the Department of Health, Education, and Welfare for its activities through August of 1973.

The areas of program emphases of NCRMP are Health Manpower, Emergency Medical Services, Quality of Personal Health Care Service, and Per-

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Don L. Weston, M.D.
J. William Giesen, M.D.
Delano W. Bolter, M.D.

Clinical Psychology:

Thomas C. Camp, Ph.D.
Card McGraw, Ph.D.
David F. Strahley, Ph.D.

Don Phillips, Administrator
R. Lindsay Shuff, M.H.A.
Asst. Administrator

AFFILIATED CLINICS

Bluefield Mental Health Center
525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
Leslie J. Borbely, M.D.

Mental Health Clinic

Professional Building, Wise, Va.
Pierce D. Nelson, M.D.

sonal Health Care Delivery Systems; 15 operational projects received funds from the grant:

The Diabetes Consultation and Education Service, now in its fifth year of funding, has developed an educational program in which thousands of physicians, allied health personnel, lay persons, and patients and their families have been involved. The program has trained a number of Diabetes Teaching Nurses who are working in local communities and has developed four publications, several of which have received national attention. The Diabetes program has been instrumental in establishing the N. C. Diabetes Association, which now has ten chapters throughout the state. The NCRMP program is currently merging with the N.C.D.A., which expects to continue many of its activities.

The Comprehensive Stroke Program, also in its fifth year of funding, operates in 19 North Carolina counties, with 21 hospitals and 13 nursing homes participating. The Stroke Program utilizes an interdisciplinary team approach to the training of physicians and allied health personnel who deal with the stroke patient from the inception of the stroke through discharge planning. As a result of the program, mortality from stroke has decreased by 50 per cent, there are fewer in-hospital complications, average hospital stay has been reduced by 4 days, and patients have been able to save up to \$240 on their hospital bill.

The Physician's Associate Training Program is providing highly trained assistants to complement physician services and thereby reduce physician manpower shortage. Although the primary goal of the program has been to provide the general practitioner and general internist with an assistant, the program also includes training in specialized areas such as radiology, pediatrics, pathology, obstetrics and gynecology, and medical and surgical subspecialties. There have been 71 graduates of the twenty-four month program.

The Rheumatic Fever Primary Prevention Program is examining the feasibility of a primary prevention program in North Carolina through the establishment of a system which identifies and treats A beta streptococcus in school children. The program, which has been initiated in the Orange-Chatham Health Center and the New Bern-Craven County School Systems, has screened over 1300 children. The feasibility study includes selection of testing methods, identification of adequate lab facilities, and studies of cost, personnel, community and legal restraints, and problems in referral systems.

The Cardiac Pacemaker Education-Information Program is a pilot effort in designing a system for registering pacemaker patients residing in North Carolina to facilitate their local management. The system would include a state-wide 24-hour information, advice, and consultation service for all N. C.

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physicians who have pacemaker patients. The pilot program, located in 3 areas of the state encompassing 9 counties, has identified over 300 pacemaker patients. Educational materials and a telephone answering service, as well as a legal, workable system for identifying pacemaker patients and obtaining necessary information, have been designed and utilized by the program.

The Adult Screening and Referral Program for Signs of Hypertension, Heart Disease, Impending Stroke, Diabetes, and Anemia is a pilot program which is designing, organizing, field testing, and evaluating a screening and referral system for North Carolina adults. Field testing is being carried out in industrial, low-income urban, suburban-rural, and low-income rural settings in Winston-Salem and Forsyth County. Volunteers can screen over 100 persons per day at a cost of less than \$2.00 per person. Tests used include the electrocardiometer, blood pressure measurement, hemoglobin, blood glucose determination, and carotid bruit. Volunteers are also utilized in follow-up and referral of screenees.

The Comprehensive Cancer Program is developing regional cancer centers in community hospitals to assist in earlier detection and better treatment for cancer patients. Elements of the program include Nuclear Medicine Training, Patient and Family Percep-

tions of Cancer Care, and a Radiation Therapy Planning Service. Other elements are Regional Telephone Cancer Conferences, support for Cancer Registry Advisory and Utilization functions, and a Coordinated Oncology Chemotherapy Program.

The Continuing Education Program for Eastern North Carolina is providing continuing education opportunities for health professionals in 7 Eastern North Carolina hospitals. These hospitals have established a working relationship with the School of Allied Health Professions of East Carolina University to identify local needs and conduct programs to meet these needs. Seminars, lectures, conferences, and workshops on a variety of subjects are being sponsored through the program.

The N. C. Emphysema and Lung Disease Program includes a training program for nurses and technicians at Duke University Medical Center and a community hospital program at Cleveland Memorial Hospital in Shelby. Nurses from community hospitals receive two weeks of training in the care of patients with chronic respiratory diseases at DUMC, while technicians are trained in spirometry studies, arterial blood gas analysis, and gas mixture analysis.

The Family Nurse Practitioner Program is training from a variety of practice sites to augment health

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services throughout North Carolina. Through the training program at the UNC-CH School of Nursing, registered nurses are prepared to provide primary health care to individuals and families in health centers, clinics, physician's offices, industries, homes, and other ambulatory care settings. As part of the program, self-instructional materials are being developed for utilization in both practice sites and local training centers. There have been 19 graduates of the program, which includes 6 months of training and a 6-month internship.

The Career-Ladder Nursing Program is designed to provide an innovative curriculum to upgrade Licensed Practical Nurses, thereby improving the quality of nurse manpower. Located at the College of the Albemarle in Elizabeth City, the model program is developing entrance exams, individualized study packets for clinical courses, and curriculum. To be conducted in cooperation with NCRMP's Equivalency and Proficiency Test Development program, the Career-Ladder Nursing Program expects to graduate its first class in the summer of 1973.

***The Neighborhood Management Centers for the Control of Hypertension and Diabetes** will establish two neighborhood management centers to study the feasibility of the management center model for follow-up therapy of patients with established hypertension and diabetes detected by NCRMP's Adult Screening and Referral Program. The centers will utilize allied health personnel to provide medical services for the indigent and the medically underserved in selected areas of Winston-Salem.

***The Equivalency and Proficiency Test Development Program** will utilize the expertise of the Educational Testing Service to develop tests for use with Licensed Practical Nurses or others with some training and experience. The tests will be used by associate or baccalaureate degree programs to certify the past training of applicants for credit or advanced placement. The testing instruments will have potential for transfer to other allied health disciplines and other states.

***The Area Health Education Systems** are designed to promote optimum utilization of area resources in the development of education and training opportunities for local health care personnel. Each system is an independent organization which includes health care, educational and health planning organizations, institutions and agencies from its own geographic area.

The Program for Care of Patients with Chronic Uremia is designed to extend dialysis and transplantation to an increasing number of patients with kidney disease by improving community-based dialysis and treatment centers, by implementing educational

programs, and by activating support for an organ retrieval system. The program provides support for a transplant coordinator and community-based personnel for selected areas in the state.

WAKE COUNTY MEDICAL SOCIETY

George W. Paschal, Jr., M.D. of Raleigh has received a special recognition award in tribute to his long tenure of service to the Selective Service System.

Colonel Bill McMackran made the presentation of the Exceptional Service Award at the August meeting of the Wake County Medical Society. Dr. Paschal is one of eight physicians in the United States who has served consecutively since 1950.

In response, Dr. Paschal said, "These 22 years of service have brought me in contact with many individuals and families and though the responsibilities of this appointment have been difficult at times, I have received consolation by men and families thanking me for my services."

Dr. Paschal was first appointed to the Selective Service Board by President Truman and has repeatedly been appointed by the President of the United States to this service agency over the 22 year period.

The medical society voted to support local efforts to form a local chapter of the Medical Assistant's Association. Presently there are 11 local chapters in North Carolina.

O'BERRY CENTER

Dr. Vernon Mangum, superintendent of O'Berry Center at Goldsboro, resigned effective Aug. 1, and Dr. Nicholas Stratus, regional Commissioner for the South Central Region, is now also serving as acting superintendent at O'Berry until a permanent replacement is named. Dr. Mangum, desiring to return to clinical work, declined reappointment as superintendent at the end of his tenure in January, 1971. He had served as acting superintendent since that time to help complete plans for reorganization of the institution. He will remain on the O'Berry staff as a clinical physician.

O'Berry was originally organized along the traditional department structure. This structure resulted in centralization, limitations to treatment and rehabilitation, and has had a dehumanizing effect on the residents. In late 1970 the staff began evaluating the programs and administration of the center to develop a plan of reorganization that would make the most effective use of available resources to meet the needs of residents at the institution. Reorganization was begun to provide a comprehensive program that will enable each mentally retarded child or adult living at the center to attain his maximum potential and return to his community if possible.

On taking over his new duties as acting superintendent, Dr. Stratus said, "O'Berry has come a long way

* New projects as of September 1, 1972.

in its development. . . . The role of this institution has been transformed from custodial care to active treatment of patients and involvement in key programs for communities in the South Central region. The quality of care and treatment has steadily increased. These developments have been the direct result of the efforts of all O'Berry staff members and the leadership of Dr. Mangum."

AMERICAN HEART ASSOCIATION

John Alexander McMahon, president of North Carolina Blue Cross and Blue Shield and a leader in health affairs in his home state and nationally, has been named president of the American Hospital Association (AHA).

McMahon's appointment was announced by Stephen M. Morris, chairman of the Board of Trustees. Morris said it is expected that McMahon will assume his new responsibilities Nov. 1.

As president of the 7,000 institutional members and 18,000 personal members, the 51-year old Alex McMahon will succeed the late Edwin L. Crosby, M.D., chief executive officer of the AHA for 18 years, whose death in February precipitated an intensive, nationwide search for a successor.

"Alex McMahon is a health administrator, an educator, a lawyer, a civic leader, and a voluntary public servant," said Morris. "His career has superbly qualified him to direct the activities of our Association in the crucial and challenging years ahead."

Currently chairman of the Duke University Board of Trustees, McMahon has been a consultant to the Social Security Administration's Task Force on Hospital and Extended Care Services of the Health Insurance Benefits Advisory Council.

Two American Teachers Will Represent the United States at Moscow Conference for Blind Computers.

Two American university teachers have been named to represent the United States this fall in Moscow at an international conference on the education and employment of blind computer programmers. The American representatives will be Abraham Nemeth, Ph.D., an associate professor of mathematics at the University of Detroit, and Charles E. Hallenbeck, Ph.D., an assistant professor of psychology at the University of Kansas. Both men, who are blind, will be among the key speakers at the conference, which will be held November 13-17.

Dr. Nemeth and Dr. Hallenbeck have both been active in computer research. Dr. Nemeth is creator of the Nemeth Code, the braille notation method used widely by blind people in mathematics, the sciences, and computer programming.

The American professors will attend the conference under the auspices of the American Foundation for Overseas Blind, a New York-based organization

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Warnings: Safety in pregnancy not established. Do not use for group A beta-hemolytic streptococcal infections, as sequelae (rheumatic fever, glomerulonephritis) are not prevented. Deaths reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. CBC and urinalysis with careful microscopic examination should be performed frequently.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy or bronchial asthma. Hemolysis, frequently dose related, may occur in glucose-6-phosphate dehydrogenase-deficient patients. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; *Miscellaneous reactions:* Drug fever, chills and toxic nephrosis with oliguria and anuria. Periarthritis nodosa and L.E. phenomenon have occurred. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.



In acute, recurrent or chronic nonobstructed cystitis

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Gantrisin quickly reaches peak antibacterial concentrations in the urine—usually in 2 to 3 hours. With the recommended dosage regimen, Gantrisin maintains these high urinary levels throughout therapy to combat such susceptible organisms as *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

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*Koch-Weser, J., et al.: Arch. Intern. Med., 128:399, 1971.

For nonobstructed cystitis

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Usual adult dosage:

4 to 8 tablets *stat*
2 to 4 tablets *q.i.d.*



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serving the international field of blindness, and the All-Russia Society for the Blind, of Moscow. The Soviet agency, which will be the host for the con-

ference, has issued invitations to organizations for the blind from 15 countries. Each country will send two representatives.

Month in Washington

The Republican platform for the 1972 presidential campaign has planks opposing compulsory national health insurance and legalization of marijuana.

The Democratic platform advocates a national health insurance program for all Americans financed and administered by the federal government. It does not mention the marijuana issue.

The American Medical Association's recommendations on the Republican health care plank was presented by Donald E. Wood, M.D., a member of the AMA Board of Trustees, at a convention subcommittee hearing before the platform was drafted.

Dr. Wood expanded on a "theme of priority setting and realistic acknowledgment of fiscal limitations."

"We believe that this is the only possible foundation for sound public policy in setting our health and other national goals," Dr. Wood said.

"In setting our health goals, it is not necessary to destroy a system that has given this nation its high level of health and scientific achievement. Our goals will be best attained by building upon the strengths of this system. What is necessary is that all of us—government, public, and the professions—work together to find solutions that will not only meet the needs of today but will assure a system that even more successfully will meet the needs of tomorrow."

Text of Republican health care plank:

Our goal is to enable every American to secure quality health care at reasonable cost. We pledge a balanced approach—one that takes into account the problems of providing sufficient medical personnel and facilities.

Last year President Nixon proposed one of the most all-inclusive health programs in our history. But the opposition Congress has dragged its feet and most of this program has yet to be enacted into law.

To increase the supply of medical services, we will continue to support programs to help our schools graduate more physicians, dentists, nurses, and allied health personnel, with special emphasis on family practitioners and others who deliver primary medical care.

We will also encourage the use of such allied personnel as doctors' assistants, foster new area health education centers, channel more services into geographic areas which now are medically deprived, and improve the availability of emergency medical care.

We note with pride that the President has already signed the most comprehensive health manpower legislation ever enacted.

To improve efficiency in providing health and medical care, we have developed and will continue to encourage a pluralistic approach to the delivery of quality health care including innovative experiments such as health maintenance organizations. We also support efforts to develop ambulatory medical care services to reduce hospitalization and keep costs down.

To reduce the cost of health care, we stress our efforts to curb inflation in the economy; we will also expand the supply of medical services and encourage greater cost consciousness in hospitalization and medical care. In doing this we realize the importance of the doctor-patient relationship and the necessity of insuring that individuals have freedom of choice of health providers.

To assure access to basic medical care for all our people, we support a program financed by employers, employees and the Federal Government to provide comprehensive health insurance coverage, including insurance against the cost of long-term and catastrophic illness and accidents and renal failure which necessitates dialysis, at a cost which all Americans can afford. The National Health Insurance Partnership plan and the Family Health Insurance Plan proposed by the President meet these specifications. They would build on existing private health insurance systems, not destroy them.

We oppose nationalized compulsory health insurance. This approach would at least triple in taxes the amount the average citizen now pays for health and would deny families the right to choose the kind of care they prefer. Ultimately it would lower the overall quality of health care for all Americans.

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ing health in the long run is by emphasis on preventive measures.

The serious physical fitness problem in our country required urgent attention. The President recently reorganized the Council on Physical Fitness and Sports to increase the leadership of representatives of medicine, physical education, sports associations and school administrations. The Republican Party urges intensification of these efforts, particularly in the Nation's school systems, to encourage widespread participation in effective physical fitness programs.

We have initiated this Nation's first all-out assault against cancer. Led by the new National Cancer Institute, the drive to eliminate this cruel killer will involve Federal spending of nearly \$430 million in fiscal year 1973, almost twice the funding of just two years ago.

We have also launched a major new attack on sickle cell anemia, a serious blood disorder afflicting many black Americans, and developed a comprehensive program to deal with the menace of lead-based paint poisoning, including the screening of approximately 1,500,000 Americans.

We support expanded medical research to find cures for the major diseases of the heart, blood vessels, lungs and kidneys—diseases which now account for over half the deaths in the United States.

We have significantly advanced efforts to combat

mental retardation and established a national goal to cut its incidence in half by the year 2000.

We continue to support the concept of comprehensive community mental health centers. In this fiscal year \$135 million—almost three times the 1970 level—will be devoted to the staffing of 422 community mental health centers serving a population of 56 million people. We have intensified research on methods of treating mental problems, increasing our outlays from \$76 million in 1969 to approximately \$96 million for 1973. We continue to urge extension of private health insurance to cover mental illness.

We have also improved consumer protection, health education and accident prevention programs. And in Moscow this year, President Nixon reached an agreement with the Soviet Union on health research which may yield substantial benefits in many fields in the years ahead.

Excerpts from Republican drug abuse plank:

The permissiveness of the 1960's left no legacy more insidious than drug abuse. In that decade narcotics became widely available, most tragically among our young people. The use of drugs became endowed with a sheen of false glamour identified with social protest.

By the time our Nation awakened to this cancer-

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ous social ill, it found no major combat weapons available.

Soon after we took office, our research disclosed there were perhaps hundreds of thousands of heroin users in the United States. Their cravings multiplied violence and crime. We found many more were abusing other drugs, such as amphetamines and barbiturates. Marijuana had become commonplace. All this was spurred by criminals using modern methods of mass distribution against outnumbered authorities lacking adequate countermeasures.

We quickly launched a massive assault against drug abuse.

We intercepted the supply of dangerous drugs at points of entry and impeded their internal distribution. . . .

To inhibit the distribution of heroin in our own country, we increased the law enforcement budget for drug control more than 10 times—from \$20 million to \$244 million. . . .

We established the "Heroin Hot Line"—a nationwide toll free phone number (800/368-5363)—to give the public a single number for reporting information on heroin pushers. . . .

To alert the public, particularly the youth, to the dangers of drugs, we established a National Clearinghouse for Drug Abuse Information in 1970 as well as a \$3.5 million Drug Education and Training Program.

We realize that the problem of drug abuse cannot be quickly solved, but we have launched a massive effort where practically none existed before. . . .

We pledge to seek further international agreements to restrict the production and movement of dangerous drugs.

We pledge to expand our programs of education, rehabilitation, training and treatment. We will do more than ever before to conduct research into the complex psychological regions of disappointment and alienation which have led many young people to turn desperately toward drugs.

We firmly oppose efforts to make drugs easily

available. We equally oppose the legalization of marijuana. We intend to solve problems, not create bigger ones by legalizing drugs of unknown physical impact.

We pledge the most intensive law enforcement war ever waged. We are determined to drive the pushers of dangerous drugs from the streets, schools, and neighborhoods of America.

* * *

A new kind of flu vaccine has been developed by government scientists containing live viruses that they believe holds hope of greatly containing future influenza epidemics.

The vaccine still must be put through extensive tests and trials, before being licensed for use on the public. But scientists who reported the development were hopeful that this could be done before the next major expected U.S. flu epidemic in the latter part of the decade.

In their research at the National Institute of Allergy and Infectious Diseases of the National Institutes of Health in Bethesda, Maryland, the scientists said they employed the live, though weakened, viruses in developing the vaccine.

The scientists performed a laboratory trick to produce an immunity to the flu with the live viruses without causing the disease itself.

The trick involved creating a hybrid virus that cannot stand the heat of the lungs, where it could bring about the disease. This hybrid, however, thrives in the lower temperatures of the nose and throat, where it produces protection against the flu.

The new vaccine was given as a nasal spray instead of an injection.

None of the 17 persons given the new type of vaccine in tests caught the influenza even when exposed to it. But 17 of 28 not given the vaccine caught the influenza.

None of the 17 given the new vaccine suffered any of the side effects associated with presently used killed virus vaccines—wooziness, headaches, a low fever and slight nausea.

Nothing would tend more to prevent the milk fever, than putting the child early to the breast. The custom of not allowing children to suck for the first two or three days, is contrary to Nature, and common sense, and is very hurtful both to the mother and child.

Every mother who has milk in her breast, ought either to suckle her own child, or to have her breasts frequently drawn, at least for the first month. This would prevent many of the diseases which prove fatal to women in child-bed. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 364.

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Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 51.50	\$128.50	\$179.50
40 - 49	78.00	189.00	240.50
50 - 59	114.00	260.50	312.00
60 - 64*	179.00	400.00	451.00

PLAN B—\$300 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 31.00	\$ 71.00	\$ 93.50
40 - 49	47.50	110.00	132.50
50 - 59	74.00	158.50	181.50
60 - 64*	112.50	251.00	273.50

PLAN C—\$500 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 19.50	\$ 43.00	\$ 57.00
40 - 49	32.00	74.00	88.00
50 - 59	51.50	114.00	127.50
60 - 64*	86.50	192.50	206.50
65 - 69	36.00	106.00	119.50

* Renewal rates only—When an Insured Member attains Age 65 he may continue to be insured under the \$500 Deductible Plan which is integrated with Medicare.

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Under 30	\$ 27	\$ 54	\$ 81	\$ 108	\$ 135	Under 30	\$ 11
30-34	29	58	87	116	145	30-34	12
35-39	38	76	114	152	190	35-39	15
40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
65-69	242	484	726	968	1,210	65-69	97

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Book Reviews

Cancer Diagnosis in Children. By L. D. Samuel, M.D.
Price, \$25.00. Cleveland, Ohio: CRC Press, 1972.

This is another book in the Chemical Rubber Company's Uniscience series. A readable work that can be digested in a few evenings, it brings together for examination most of the currently employed diagnostic procedures for the detection of childhood cancer. The techniques discussed include radiological and radioisotopic studies, surgical methods, clinical pathological techniques, echoencephalography and electroencephalography, and even the fundamentals of the physical examination. The author makes many valuable points, and the illustrations are excellent.

The major shortcoming of the book is overemphasis of the author's main field of interest—radioisotopes. More than half of the pages are devoted to nuclear medicine as opposed to only four to surgery and eight to pathology. Perhaps a more appropriate title would have been "Cancer Diagnosis in Children Using Radiological and Radioisotopic Techniques." Some of the other diagnostic procedures are only superficially covered.

The sections on nuclear medicine are by far the strongest in the book, and are relatively complete. The author presents an interesting compilation of cases illustrating most of the currently available radioisotopic techniques. Some of the material is slightly repetitious, such as the numerous references to the author's interesting experience with Strontium-87m concentration in non-osseous lesions. Unfortunately little or no mention is made of the use of the gamma camera for rapid imaging of the pediatric patient, or for obtaining dynamic organ studies, which are gaining importance in pediatric nuclear medicine.

The intended readership, which ranges from the physician to "anyone concerned with child health," may have been too diverse, for the author was forced to fluctuate between elementary definitions ("The vena cava is the largest vein in the body") to complex descriptions of technical aspects of radiological procedures.

This work should not be considered a complete reference text, particularly the nonradiological sections, but it does provide an overview of diagnostic methods, many of them only recently introduced. I would recommend it to anyone interested in pediatric oncology who desires a rapid review of the cur-

rently available diagnostic techniques of radiology and nuclear medicine.

ROBERT J. COWAN, M.D.

Review of Medical Pharmacology. Edition 3. By F. H. Meyers, Ernest Jawetz, and Alan Goldfien. 688 pages. Price, \$8.50. Los Altos, California: Lang Medical Publications, 1972.

The third edition of this already well established *Review of Medical Pharmacology* continues to fulfill, largely, the authors' stated goals. It is to appear, after editorial trimmings, every two years, and will present the cream of the current therapeutic crop in a form easily digested by medical students, practitioners, nurses, and other medically allied personnel. As the authors point out, such an undertaking precludes extensive theoretical considerations, if size and cost are to be kept at a minimum. It is not to be expected, therefore, that this book should represent a complete text of pharmacology suitable for the serious student or for investigators in drug-related research.

Within these stipulated limits the authors present a readable text which is amply illustrated by diagrams and tables. Virtually all areas of drug use are broached, and recent additions reflect current trends. The latter are exemplified by the addition of discussions on lithium carbonate (CNS drugs) and spectinomycin (antibiotics). The section on cancer chemotherapy has undergone a major overhaul, with greater emphasis being placed on possible mechanisms of drug action as well as newer concepts of cyclic drug therapy. Such presentations as this, the CNS drugs, the antimicrobial agents, and the sections related to endocrinology (hormones) enhance the book's otherwise meager attempt to relate drug therapy to pathophysiology. The chapter on respiratory drugs is poor and is largely dismissed on the grounds that the drugs are "discussed in other chapters" but without adequate references to such chapters. An outstanding deficit is the absence of a meaningful treatise on drug interaction. An attempt to touch base on this subject was made inasmuch as the title of Chapter 2 has been changed from "Absorption, Metabolism, and Excretion" (Second Edition) to "Pharmacokinetics and Drug Interaction" (Third Edition). It remains, however, the same box with a new wrapper. There is a valuable appendix

which outlines effects that drugs might have on selected laboratory tests. It appears to be fairly current, a feature which is necessary for meaningful help in this area.

This book is, indeed, a *review* in the sense that one may derive benefit from its use—much more so if one has had previously a good foundation in basic pharmacology. It becomes more than a review in the selected areas noted earlier.

Despite certain shortcomings and a mild degree of bias, always necessary in condensations of this sort, this soft bound text must rank as a "best buy." It has for members of its intended audience more useful information and less misinformation per dollar than any comparable text.

JOHN S. KAUFMANN, M.D., Ph.D.

Chemical and Biological Aspects of Drug Dependence.

Editors S. J. Mulé and Henry Brill, CRC Press, The Chemical Rubber Co., 18901 Cranwood Parkway, Cleveland, Ohio, 1972, Price \$35.00. 561 pages.

In a field studded with self-proclaimed "experts" ranging from "junkies" on every street to the President of the U.S., it is reassuring to find an authoritative reference. Although the health professions are busily trying to elucidate the "root" causes of drug dependence by collecting a variety of clinical and sociological data, there is a substantial body of basic science data already extant. It is to this area, the scientifically validated information, that this volume addresses itself.

The editors have organized the material well and in logical sequence. The section on "Significance and Characteristics of Drug Dependence" introduces definitions which are necessary for interpretation of the sections to follow. The chapter on "Criteria for Evaluating Drug Dependence" is particularly useful

in helping one see that there is no difference between dependence on drugs which carry a social stigma (barbiturates) and those which do not (alcohol). Having sorted out one's feelings about hallucinogens from the scientifically observable facts, one is in a far better position to make necessary clinical judgments. This chapter is helpful in this regard.

Subsequent sections and chapters on the chemical, physical, pharmacologic and biochemical aspects of drug dependence are uniformly well done. Each section is followed by a wealth of references for those seeking specific details.

Having pointed out the good things about this book, it is necessary now to note a few that are bad. First—and this is a relatively minor point—it would be well if a few details had been noted about each author. Some are sufficiently well known to make such notations appear superfluous. However, others are less well known and interpretation of what they say would be facilitated by knowledge of their academic and research background.

Secondly, the absence of an index probably halves the value of the book as a reference. Since the editors state that their purpose is "to provide the scientist with a reference text that provides the basic knowledge . . . of drug dependence," the absence of an index seems to me to be a major deficit.

Finally, the price of the book (\$35.00) is excessive. For a book this expensive it would seem reasonable to expect top quality paper and certainly deletion of the last three pages consisting of advertisements for other publications of the CRC Press.

Barring the deficits listed, the book is to be recommended as a reference work for all health professionals concerned with the field of drug dependence.

DONALD M. HAYES, M.D.

Dr. Cheyne avers, that want of children is oftener the fault of the male than of the female, and strongly recommends a milk and vegetable diet to the former as well as the latter; adding, that his friend Dr. Taylor, whom he calls the Milk-doctor of Croydon, had brought sundry opulent families in his neighbourhood, who had continued some years after marriage without progeny, to have several fine children, by keeping both parents, for a considerable time, to a milk and vegetable diet. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 368.*

In Memoriam

Horton Grey Jolly, M.D.

Dr. Horton Grey Jolly, anesthesiology, died in Kinston, June 5, 1972.

Dr. Jolly was born in Greenville, N. C., on Sept. 16, 1939. He was reared in Ayden and attended the Ayden elementary schools and high school, graduating in 1957. He received an A.B. degree in chemistry from the University of North Carolina at Chapel Hill in 1961 and his M.D. degree from the University of North Carolina School of Medicine in 1965.

Dr. Jolly's postgraduate education consisted of a surgical internship at the University of Florida Teaching Hospital 1965-1966, and a residency in anesthesiology at the same institution, July, 1966-December, 1968. He was an instructor in the division of anesthesiology at the University of North Carolina School of Medicine from Jan. 1, 1969 through Dec. 31, 1969. He was an assistant professor at the university in January, 1970 and served through June of that year.

After leaving the University of North Carolina, he went to Winston-Salem, where he practiced at Forsyth Memorial Hospital and Medical Park Hospital until he came to Kinston in February, 1972.

Dr. Jolly had made great strides since coming to Kinston with his expert anesthesiology. He had a particular interest in teaching and was personally responsible for the improvement in each nurse-anesthetist. His teaching was also reflected in ancillary areas such as physical therapy, inhalation therapy, and recovery and intensive care rooms. He had been well accepted by the public as well as the professional staff, of which he was an integral part.

He was a member of Sigma Phi Epsilon fraternity at the University. He was a member of the American Medical Association, the American Society of Anesthesiologists, the North Carolina Anesthesiology Society, and the North Carolina Medical Society.

Surviving are his wife, the former Marcia Kenyon Davis; two sons, Horton Grey Jolly and Douglas Kenyon Jolly; and his parents, Mr. and Mrs. William O. Jolly, Jr., of Ayden.

Horton was well liked by his friends and patients, and dedicated to his practice. He will be greatly missed by this society.

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Barrenness may be very properly reckoned among the diseases of females, as few married women who have not children enjoy a good state of health. It may proceed from various causes, as high-living, grief, relaxation, etc. but it is chiefly owing to an obstruction or irregularity of the menstrual flux. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Richard Folwell, 1799, p. 368.

Plan Ahead for
**FUTURE
MEDICAL SOCIETY
MEETINGS**

ANNUAL MEETING

The Carolina, Pinehurst, N. C.

1973-May 19-23

1974-May 18-22

LEADERSHIP CONFERENCE

The Carolina, Pinehurst, N. C.

1973-January 26-27 / 1974-January 25-26

COMMITTEE CONCLAVE

Mid Pines Club, Southern Pines, N. C.

1973-September 26-30

1974-September 25-29

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES
AND SELECTED CITIES OF RESIDENCE,
WITH RATES PER 1,000 DELIVERIES* - NORTH CAROLINA,
JULY 1972 AND MOST RECENT 12-MONTH TOTALS

.....WHITE.....									NONWHITE.....										
COUNTY	PERINATAL DEATHS		TOTAL DELVY	PER 1,000 NATAL RATE PER DELVY	COUNTY	PERINATAL DEATHS		TOTAL DELVY	PER 1,000 NATAL RATE PER DELVY										
	JUL 1972	AUG 1971-1972	JUL 1972	AUG 1971-1972		JUL 1972	AUG 1971-1972	JUL 1972	AUG 1971-1972										
	JUL 1972	AUG 1971-1972																	
NORTH CAROLINA									163	1763	65056	27.1	114	1192	28541	41.8			
ALAMANCE	3	34	1276	23.2						JOHNSTON	1	29	780	37.2	1	15	296	50.7	
ALEXANDER		7	352	27.1						JUNES		1	78	-		1	78	-	
ALLEGHANY	1	6	124	48.4						LEE	1	12	491	29.9		12	166	72.3	
ANSON	1	7	196	35.7						LENOIR	1	19	362	33.8		4	18	452	39.8
ASHE		14	332	46.4						LINCOLN		11	522	21.1		4	116	-	
AVERY	2	13	217	46.1						MOOREWELL	4	17	553	30.9		1	39	-	
BEAUFORT	3	11	376	29.3						MACON		4	226	-			9	-	
BERTIE		4	176	-						MADISON	1	14	244	57.4			1	-	
BLADEN	4	249	-	-						MARTIN		6	196	30.6		1	17	268	63.4
BRUNSWICK	5	331	-	-						MECKLENBURG	10	86	4169	21.1		6	87	2331	37.3
BUNCOMBE	5	69	1923	35.9						MITCHELL		3	184	-			1	-	
BURKE	2	23	1026	22.4						MONTGOMERY	1	5	247	20.2		1	4	120	-
CABARRUS	2	23	963	23.9						MOORE	1	15	466	32.2		1	16	229	69.9
CALDWELL	2	33	1037	29.1						NASH		12	504	21.3		4	13	511	25.4
CAMDEN	1	35	-	-						NEW HAMPSHIRE	1	29	1160	24.9		15	450	33.3	
CARTERET	1	7	579	17.7						NORTHAMPTON		4	106	-		1	15	296	50.7
CASWELL	1	13	137	63.7						ONSLOW	1	64	2232	26.7		2	7	431	16.2
CATAWBA	5	36	1533	37.3						ORANGE	4	22	729	30.2		2	17	221	76.9
CHATHAM	2	11	314	35.7						PAMLICU	1	2	95	-		3	58	-	
CHEROKEE	2	256	19.5	-						PASQUOTANK	1	6	277	21.7		4	162	-	
CHOWAN	1	3	64	-						PENDER		3	161	-		1	4	152	-
CLAY	1	3	49	-						PERQUIMANS		1	37	-			49	-	
CLEVELAND	2	33	957	34.5						PERSIMMON		7	297	23.0		3	7	218	32.1
COLUMBUS	5	29	516	57.1						PITT	2	20	625	32.0		5	30	632	47.5
CRAVEN	5	27	1172	23.0						POLK	1	4	144	-			21	-	
CUMBERLAND	3	91	3734	24.4						RANDOLPH	5	35	1182	29.6		1	4	118	-
CURRITUCK	1	3	63	-						RICHMOND		13	459	23.3		1	11	247	44.5
DARE	1	3	170	-						ROBESON		13	603	21.4		7	62	1720	36.0
DAVIDSON	2	46	1479	31.1						ROCKINGHAM		28	1009	27.9		1	25	385	64.9
DAVIE	2	17	266	37.6						ROWAN	2	20	1115	17.9		1	11	320	34.4
DUPLIN	1	8	372	21.5						RUTHERFORD	1	17	668	25.4		6	171	35.1	
DURHAM	2	33	1277	25.0						SAMPSON	1	9	412	21.8		1	9	332	27.1
EDGECOMB	3	7	362	13.3						SCOTLAND		14	303	46.2		13	322	40.4	
FORSYTH	6	50	2421	20.7						STANLY		16	606	26.4		6	130	46.2	
FRANKLIN	3	176	-	-						STOKES	4	14	393	35.5		2	65	-	
GASTON	5	52	2565	20.3						SURRY	3	28	892	31.4		1	4	61	-
GATES	1	3	48	-						SWAIN	1	3	105	-			18	-	
GRAHAM	1	3	45	-						TRANSYLVANIA	2	10	264	37.9		1	14	-	
GRANVILLE	1	17	217	46.1						TYNELL		1	13	-		2	33	-	
GREENE	1	36	-	-						UNION	3	19	777	24.5		2	23	329	69.9
GUILFORD	7	62	3289	24.9						VANCE	2	10	349	28.7		2	17	350	48.6
HALIFAX	2	17	590	43.6						WAKE	5	66	2760	23.7		3	36	1116	34.1
HARNETT	4	16	636	25.1						WARREN		72	-	-		8	174	46.0	
HAYWOOD	6	27	819	32.3						WASHINGTON		1	127	-		1	14	129	108.5
HENDERSON	2	22	694	31.7						WATAUGA		9	345	29.1		1	6	-	
HEKTFORD	1	3	126	-						WAYNE		37	1153	32.1		2	25	615	40.7
Hoke	1	2	125	-						WILKES	2	22	330	26.5		1	50	-	
HYDE	1	3	42	-						WILSON		10	513	19.4		4	23	543	42.2
IREDELL	2	19	695	21.3						YADKIN	1	10	373	26.8		2	27	-	
JACKSON	1	10	267	37.5						YANCEY	1	4	190	-			4	-	
CITIES CITY TOTALS ARE ALSO INCLUDED IN COUNTY TOTALS																			
ALBEMARLE	1	1	142	-						LENOIR	1	7	136	37.6		1	41	-	
ASHEBORO	1	2	236	-						LEXINGTON		9	235	33.3		3	85	-	
ASHEVILLE	1	21	584	36.0						LUMBERTON		3	162	-		9	203	44.3	
BURLINGTON	2	16	469	33.4						MUNROE		2	125	-		9	107	84.1	
CHAPEL HILL		5	253	19.8						MURKINTON		5	123	39.1		1	25	-	
CHARLOTTE	6	57	2527	22.6						NEW BERN		2	155	-		4	155	-	
CONCORD	1	6	163	36.8						RALEIGH	1	29	1262	23.3		3	27	601	44.9
DURHAM	2	16	762	23.6						REIDSVILLE		6	144	41.7		5	92	-	
EDEN		3	135	43.2						ROANOKE RAPIDS	1	7	182	38.5		3	33	-	
ELIZABETH CITY	3	137	-	-						ROCKY MOUNT E.	1	2	92	-		7	132	53.0	
FAYETTEVILLE	2	24	957	25.1						ROCKY MOUNT N.		5	222	22.5		1	6	118	50.8
GASTONIA	4	25	705	39.5						ROCKY MOUNT C.	1	7	314	22.3		1	13	250	52.0
GOLDSBORO	1	17	266	35.0						SALISBURY		4	166	-		7	148	47.3	
GREENSBORO	2	33	1572	21.0						SANFORD		4	134	-		5	79	-	
GREENVILLE	1	6	249	32.1						SHELBY	5	155	32.3		1	4	109	-	
HENDERSON	2	6	171	35.1						STATESVILLE		3	190	-		6	172	34.9	
HICKORY	2	14	331	46.5						THOMASVILLE		6	202	29.7		3	10	96	-
HIGH POINT	2	23	737	31.5						WILMINGTON	1	14	302	27.9		12	393	30.5	
JACKSONVILLE	16	367	41.3	-						WILSON		3	262	-		1	9	242	37.2
KINSTON	7	239	37.7	-						WINSTON SALEM	2	25	1115	22.4		7	46	1081	42.6

PERINATAL DEATHS = STILLBIRTHS OF 20 WEEKS GESTATION OR MORE + NEONATAL DEATHS UNDER 28 DAYS OF AGE
TOTAL DELIVERIES = STILLBIRTHS OF 20 WEEKS GESTATION OR MORE + TOTAL LIVE BIRTHS
*PERINATAL DEATH RATE = PERINATAL DEATHS DIVIDED BY TOTAL DELIVERIES TIMES 1000
RATES ARE NOT CALCULATED FOR LESS THAN 100 DELIVERIES OR LESS THAN 5 PERINATAL DEATHS

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NORTH CAROLINA

Medical Journal

IN THIS ISSUE: Maternal Mortality in North Carolina, 1966-1970, Stephen G. Anderson, M.D., Frank C. Greiss, Jr., M.D., and W. Joseph May, M.D.; Group Psychotherapy: Current Concepts and Styles, Robert D. Phillips, M.D., and Janet B. Marks; The Abortion Explosion, J. F. Hulka, M.D.

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1973 LEADERSHIP CONFERENCE
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The negative power of undue anxiety
in congestive heart failure...

This man thinks he can no longer
take breathing for granted.



PRESIDENT'S NEWSLETTER

NORTH CAROLINA MEDICAL SOCIETY

No. 6

November 2, 1972

SPECIAL ATTENTION IS CALLED TO THE EDITORIAL IN THE OCTOBER ISSUE OF THE NORTH CAROLINA MEDICAL JOURNAL which addresses itself to the important role of alternate delegates as contributing members of the House of Delegates of the North Carolina Medical Society. Dr. James Davis, Speaker of the House of Delegates, has prepared this in an effort to stimulate even more meaningful participation in the deliberations of the House by the alternate delegate, who, in many instances, will become a voting delegate in a short time.

PHASE II OF THE PRICE CONTROLS AFFECTING THE HEALTH SERVICES INDUSTRY is currently scheduled to end in April 1973. At a recent regional meeting of the Health Services Industry Committee held in Miami, it was the opinion of those present that some form of wage and price control involving the health services industry would continue after this date, although the exact form of this is as yet undetermined, and the present personnel in Washington dealing with the Phase II program are not currently working on Phase III, though they feel that most probably "someone is". For a North Carolina physician faced with economic problems in practice associated with the wage and price control program of Phase II, it appears currently that the local internal revenue agent is the best source of information. In addition, the Medical Society also has now some information for the guidance of its members as a result of its representation at the recent regional meeting.

DR. GEORGE JOHNSON OF CHAPEL HILL, N. C., WHO IS A REPRESENTATIVE OF THE NORTH CAROLINA MEDICAL SOCIETY TO THE ADVISORY COMMITTEE FOR AMBULANCE SERVICES OF THE STATE BOARD OF HEALTH reports that under the direction of Dr. Martin Hines and Mr. Art Lamson, the training program for ambulance attendants in North Carolina continues to function effectively but needs the dedicated support of the physicians of North Carolina in serving as instructors for local units. The State Medical Society continues to support this program vigorously and recommends this further situation in which a local doctor can participate in on-going programs for improved health care in his own community in connection with emergency services.

THE AMERICAN MEDICAL ASSOCIATION'S CLINICAL CONVENTION IN CINCINNATI begins November 24, the day after Thanksgiving. Again, I would like to remind all members of the N. C. Medical Society that I will be given the opportunity to give testimony to the Long Range Planning Committee of the AMA at this meeting. Any Society members who have material which they would like presented to the AMA are urged to let me know about this immediately.

CONGRESS HAS EXTENDED FOR A TWO YEAR PERIOD THE NATIONAL HEALTH SERVICE CORPS' PROGRAM, and North Carolina has had several communities which have sought the assignment of National Health Service Corp personnel in the past year. Noting that local acceptance of NHSC physicians was fundamental to the achievement of the program's goals, Dr. Richard E. Palmer, a member of AMA's Board of Trustees, stated AMA's opposition to a proposed change in the

law that would eliminate the requirement for state and local medical societies or other health professions organizations to certify the need for NHSC personnel in areas with health manpower shortages. "It should be kept in mind that the great number of assignments of physician personnel made in this program to date have been possible because the local and state societies have certified the need for such health personnel," Dr. Palmer said.

THE EXECUTIVE COUNCIL AT THE MEETING ON OCTOBER 1 has approved establishment of a statewide Foundation for Peer Review, and officers and attorneys of the Society are currently seeking to draw up articles of incorporation and by-laws for this Foundation, which, it is noted, will confine itself to peer review rather than a unit aimed at the delivery of medical care. This will be an organization associated with but separate from the North Carolina Medical Society which might possibly qualify in meeting the requirements for a professional standards review organization under the HR-1 bill recently passed by both Houses of Congress. A compromise version of the Professional Standards Review Organizations proposal of Sen. Wallace Bennett (R-Utah) was approved. It would require the HEW secretary to designate PSRO areas throughout the nation by Jan. 1, 1974. These PSROs would be required, at first, to review institutional care and services. They would be comprised only of "qualified organizations representing a substantial proportion of physicians" in a given geographical area. Under certain conditions the HEW secretary would be required to poll practicing physicians within PSRO areas to determine whether an organization of physicians seeking to develop a PSRO substantially represents practicing physicians in that area. If more than half indicate that the proposed PSRO does not substantially represent them, the HEW secretary could not sign an agreement with that group. Physicians in designated areas are intended to have the exclusive right to form PSROs prior to Jan. 1, 1976. A medical society could establish a PSRO, but it would have to be a separate organization with open membership. Bennett made it clear that the first priority of PSROs is to provide peer review in hospitals and nursing homes.

CERTAIN HOUSE-SENATE PROVISIONS that would have given "health maintenance organizations" preferential treatment under Medicare and Medicaid programs were eliminated. A Senate provision that would have subsidized HMOs for financial losses incurred in treating patients was dropped, as was a House provision that would have increased federal matching funds by 25% to the states for Medicaid services provided in HMOs or community health centers. Retained were provisions that would permit Medicare patients to opt for treatment in an HMO. As an additional incentive, qualified HMOs would be allowed to keep half of any profits they realize.

SPECIFIED SERVICES PERFORMED by chiropractors would be permitted under Medicare. Such services would be limited to "manual manipulation of the spine to correct a subluxation demonstrated by x-ray to exist." To be eligible for reimbursement chiropractors must be licensed in their states and comply with minimum uniform standards to be promulgated by the HEW secretary.

WILLIAM N. HILLIARD, EXECUTIVE DIRECTOR OF THE N. C. MEDICAL SOCIETY, has been appointed to a committee of the American Association of Society Executives to assist the AMA in strengthening membership activities at all levels of organized medicine. It will work with the AMA in devising improved methods for attracting, retaining, and servicing a growing membership. AAMSE President Boyd Thompson, Exec. Director of the San Joaquin County, Calif. Medical Society, appointed nine state and county medical society executives to the committee.

Sincerely,

John Glasson, M. D.

Maternal Mortality in North Carolina, 1966-1970

Stephen G. Anderson, M.D., Frank C. Greiss, Jr., M.D., and W. Joseph May, M.D.*

To eliminate preventable maternal deaths in North Carolina, continual reappraisal of their causes and contributing factors is required. In previous studies the 20-year experience with maternal deaths in North Carolina was presented and analyzed.¹⁻⁵ At that time particular areas of concern—toxemia, hemorrhage, infection, and anesthesia—were identified and preventive measures stressed. Since a fifth five-year period, 1966-1970, is now available for evaluation, the present review was undertaken to determine recent progress and current areas of concern.

MATERIAL AND METHODS

During the current study period, 1966-1970, 383 maternal deaths were reported to the Committee on Maternal Welfare of the Medical Society of the State of North Carolina. Of these deaths, 69 occurred more than three months post partum and were excluded from analysis. A previous analysis demonstrated that the 90-day definition of maternal death excludes many nonobstetric deaths while not affecting direct and indirect obstetric deaths.¹ The remaining 314 maternal deaths comprise the basis of this report. During the study period 470,571 live births occurred in North Carolina of which 329,729 were white, and 140,842 black.

For consistency, all deaths were reviewed by one of us (SGA) and classified according to the recommendations of the Committee on Maternal and Child Care of the Council on Medical Services, American

Medical Association. Details of methods of analysis and definitions have been previously presented.¹

A specific area of difficulty in classification is death from pulmonary embolism. In this, as in a prior study,¹ deaths from pulmonary embolism occurring in the immediate puerperium were considered direct obstetric deaths—that is, resulting from complications of the pregnancy itself, from intervention elected or required by the pregnancy, or from the chain of events initiated by the complication or the intervention. It is recognized that they might be regarded as indirect obstetric deaths by some authors; that is, resulting from disease (thrombophlebitis) developing before or during pregnancy and obviously aggravated by the effects of the pregnancy. Since most deaths from pulmonary embolism occurred while the parturients were hospitalized and were intimately related to pregnancy or delivery, we considered them direct deaths unless they occurred more than 30 days post partum.

RESULTS

The 314 maternal deaths occurring during pregnancy or within 90 days post partum are classified according to type in Table 1. For perspective, the major death rates for five-year periods since 1946 are shown in Figure 1. Although the direct obstetric death rate continues to decline, these deaths still comprise almost one-half the total maternal deaths. Indirect obstetric deaths increased slightly in the current five-year period, while nonobstetric deaths remained rather constant.

Direct obstetric deaths are classified by cause in Table 2. Toxemia, hemorrhage, and vascular accidents caused more than one third of all maternal

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* Chairman, Committee on Maternal Health, North Carolina Medical Society.

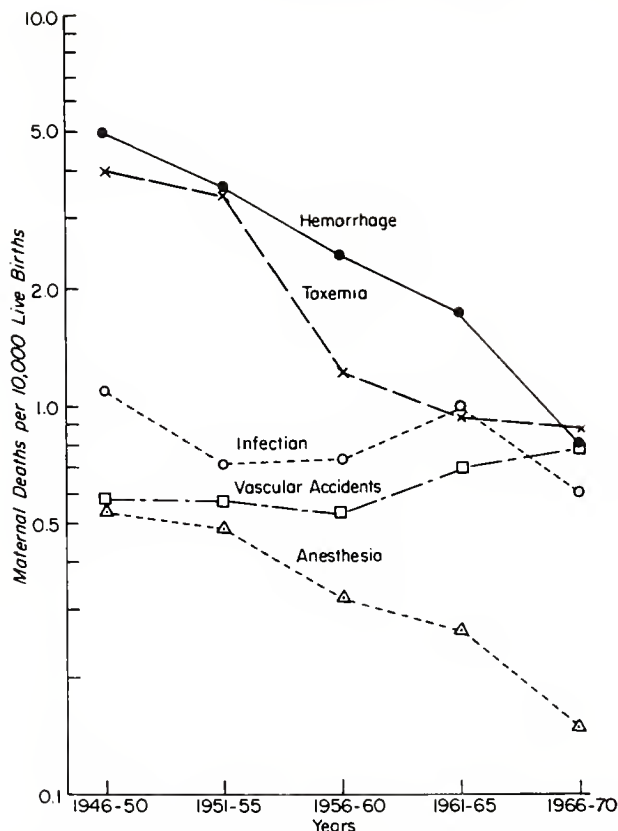


Fig. 1. Semi-log graph of maternal deaths in North Carolina according to major classifications.

deaths recorded in the last five years. Figure 2 demonstrates the trends in direct obstetric death rates since the period 1946-1950. The vascular accident rate has continued to increase since 1956-1960. Puerperal pulmonary embolism caused 19 of these 36 deaths, while amniotic fluid embolus caused 12, and air embolus 5. Although death rates from all other causes were lower, that from toxemia did not decrease appreciably as it had done in previous years.

Identifiable factors in the 40 toxemic deaths were a lack of adequate antenatal supervision and delay in hospitalization for definitive therapy. Twenty-nine (72.5 percent) of these patients had either inadequate or no prenatal care as the result of their own indifference in 18 instances, and of physician errors

Table 2
Direct Obstetric Maternal Deaths
North Carolina, 1966-70

	No.	Percent*	Rate†
Hemorrhage	37	11.8	0.79
Toxemia	40	12.7	0.85
Infection	28	8.9	0.60
Vascular accidents	36	11.4	0.77
Anesthesia	7	2.2	0.15
Other	1	0.3	0.02
Indeterminate	5	1.6	0.11
Total	154	49.1	3.28

* % of total maternal deaths

† Per 10,000 live births

in 11. A delay in hospitalization was documented in 33 cases (82.5 percent) where the responsibility was equally divided between patients and physicians. Twenty-three patients experienced actual eclampsia, which further attests to the delays in management. Although determination of responsibility was difficult and arbitrary, only 6 cases (15 percent) were considered adequately managed. Physicians were considered totally responsible in 11 cases and partially responsible in 6, while the patient, her family, or social conditions contributed to 17 deaths.

Indirect obstetric deaths are listed in Table 3. Four of the 16 deaths from vascular disease were attributed to pulmonary embolus occurring late in the puerperium. Cerebrovascular disease caused 11 deaths, and generalized arteritis 1. Indirect obstetric deaths have become relatively more important in this period (Table 1 and Fig. 1) because of the decline in direct obstetric deaths.

Nonobstetric deaths are presented in Table 4. Accidents and murder account for more than half of these deaths. The distribution of deaths and live births by race is presented in Table 5. More than half the deaths occurred in blacks, and the maternal death rate is almost three times that in whites.

COMMENT

Since the establishment of the Committee on Maternal Welfare in 1946, a gratifying decline in the total number of obstetric deaths has occurred. The total obstetric death rate decreased from 19.5 per 10,000 live births in 1946-1950 to 6.8 in the last five-year period. Even more impressive and satisfying has been the decline in direct obstetric deaths, which are thought to be most readily affected by practitioners. The direct obstetric rate is now almost one-fourth that in the first five-year period of the Committee's existence (Fig. 1).

During the years since 1946, and particularly since 1955, far fewer deaths from hemorrhage, toxemia, and anesthesia have occurred (Fig. 2). These three complications, which caused 10 maternal deaths per 10,000 live births in 1946-1950, resulted in less

Table 1
Maternal Deaths—North Carolina, 1966-70

	No.	Percent*	Rate†
Direct obstetric	154	49.1	3.28
Indirect obstetric	93	29.6	1.98
Non-related	44	14.0	0.94
Insufficient data	23	7.3	0.47
Total	314	100.0	6.67

Live births 470,570

* % of total maternal deaths

† Per 10,000 live births

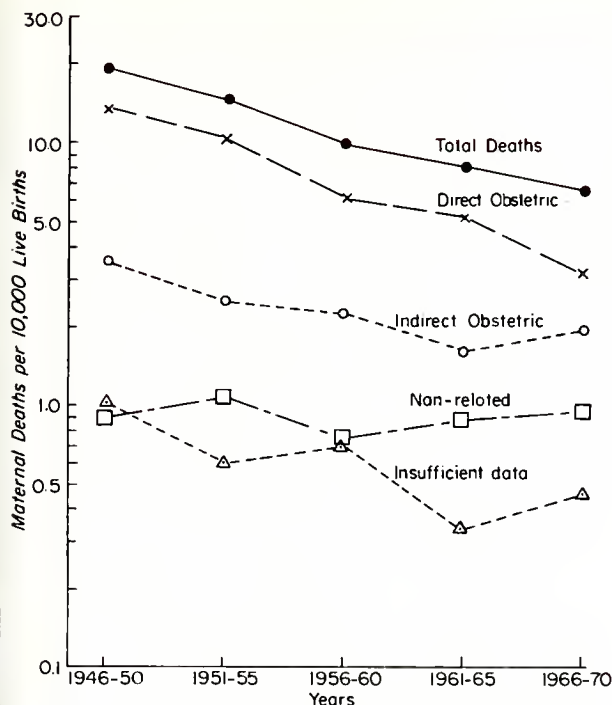


Fig. 2. Semi-log graph of direct obstetric deaths in North Carolina according to major causes.

than two deaths per 10,000 live births in 1966-1970. In addition, deaths from infection are now at the lowest rate since 1946. These reductions in maternal mortality are a credit to the Committee on Maternal Welfare, which has contributed to these improvements by promoting awareness of potential complications and encouraged preventive measures by attending practitioners.

However, complacency toward maternal mortality is not warranted at this time. The present death rates for hemorrhage, toxemia, and infection are not acceptable for modern obstetric practice and should be reduced further. The maternal death rate for toxemia is especially disturbing, since it has remained almost constant for the past ten years.

The successful management of toxemia requires prompt recognition, hospitalization for stabilization

Table 4
Maternal Deaths from Nonrelated Causes
North Carolina, 1966-70

	No.	Percent*	Rate†
Communicable Disease	3	1.0	.06
Blood dyscrasia	3	1.0	.06
Malignancy	3	1.0	.06
Suicide	2	.6	.04
Murder	9	2.9	.19
Accident	18	5.7	.38
Other	6	1.9	.13
Total	44	14.0	0.94

* % of total maternal deaths

† Per 10,000 live births

and delivery to terminate the toxemic process. From the present data, it is evident that delayed recognition and hospitalization are still the principal errors in management and continue to result in maternal deaths. Of the 17 cases with physician responsibility, delayed admission was the chief error in management in 16, and patient indifference to prenatal care resulted in delayed treatment of pre-eclampsia in 16 additional cases. Although the reasons for such delays are speculative at best, the cost of obstetric care may be the underlying factor in all of these cases. On the one hand there are indigent patients who cannot afford prenatal care and thus do not seek early obstetric supervision. Conversely, because of the high cost of inpatient care, hospitalization may be delayed for private patients until compelling reasons such as proteinuria or severe pre-eclampsia require it. Therefore, widespread resolution of these factors in toxemic deaths may depend on increased availability of obstetric care to all parturients in the state without regard to their economic status.

Vascular accidents are a cause of direct obstetric deaths requiring increased attention. Twenty-eight deaths from vascular accidents caused 3.1 percent of maternal deaths in 1946-1950, but 36 were recorded in 1966-1970, producing 11.4 percent of all maternal deaths and ranking third as a cause of direct deaths. This large relative increase in vascular accident deaths has resulted from increased recognition of embolic deaths and from the decrease of other causes of maternal mortality. They are, however, of concern, since more than one half result

Table 3
Indirect Obstetric Maternal Deaths
North Carolina, 1966-70

	No.	Percent*	Rate†
Cardiac	24	7.6	0.51
Vascular disease	16	5.1	0.34
Urinary	5	1.6	0.11
Hepatic	5	1.6	0.11
Pulmonary	21	6.7	0.45
Diabetes	1	0.3	0.02
Other	15	4.8	0.32
Indeterminate	6	1.9	0.13
Total	93	29.6	1.98

* % of total maternal deaths

† Per 10,000 live births

Table 5
Maternal Deaths by Race—North Carolina, 1966-70

	No.	Percent*	Rate†
Negro	165	52.5	11.69
Caucasian	145	46.2	4.39
Indian	3	1.0	—
Oriental	1	0.3	—
Total	314	100.0	6.67

* % of total maternal deaths

† Per 10,000 live births

from pulmonary emboli in pregnancy or the immediate puerperium.

Unfortunately, there is no simple solution for preventing pulmonary embolism in pregnancy or the puerperium. Many cases have been reported to be asymptomatic or without prior history of thrombophlebitis. The general principle of early ambulation has long been incorporated into routine obstetric practice, but the value of leg-wrapping in the presence of marked varicosities is debatable. There are, however, parturients at greater risk of pulmonary embolism. Women with severe varicosities, marked obesity, grand multiparity, a past history of thrombophlebitis, or surgical procedures such as cesarean section or tubal ligation are more likely to experience this complication.⁶ Any evidence of deep thrombophlebitis during the puerperium should alert the practitioner, and requires prompt anticoagulation with heparin, followed by one of the coumarin compounds.^{6,7} The present data emphasize the risks of thromboembolic events with operative delivery or puerperal sterilization since 9 of the 19 emboli deaths followed one of these surgical procedures.

Increased recognition has undoubtedly contributed to the increased incidence of amniotic fluid embolism. Repeatedly, two factors have been associated with these tragic deaths. One is precipitous labor, and the other, the injudicious use of oxytocin with subsequent precipitous labor or uterine rupture.^{8,9} Acknowledging repetition, we recommend that carefully monitored intravenous administration of dilute

oxytocin be used for the induction or stimulation of labor so that this contributing factor in amniotic fluid embolism can be avoided.

In the present as in the previous report,¹ the black maternal mortality rate remains almost three times the white rate. In the latest five years 52.5 percent of maternal deaths occurred in black patients, who accounted for only 30 percent of live births and comprise 23 percent of the state's population. Although prevention of deaths from vascular accidents and from indirect causes is without simple solutions, it is apparent that improving the maternal health care for the black minority segment of the population would promptly influence our maternal mortality statistics. If the black maternal death rate (11.69) had been similar to the white rate (4.39), only 62 maternal deaths would have occurred instead of 165, and the overall maternal mortality rate would be reduced by 30 percent.

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The most proper medicine for expelling the meconium is the mother's milk, which is always at first of a purgative quality. Were children allowed to suck as soon as they shew an inclination for the breast, they would seldom have occasion for medicines to discharge the meconium; but even where this is not allowed, they ought never to have daubs of syrup, oils, and other indigestible stuff, crammed down their throats.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 370.*

Group Psychotherapy: Current Concepts and Styles

Robert D. Phillips, M.D., and Janet B. Marks

GROUP psychotherapy is commonly understood by its practitioners as a program of therapeutic intent involving a small group of persons (usually 5-15 in number) who have engaged the therapist because of symptomatic difficulties in living.

Such a program is to be distinguished from one of "group experience," in which the intent is either cognitive learning about human behavior in groups, or expanded emotional awareness and expression in a special setting. Cognitive-learning programs are exemplified by the National Training Laboratory (NTL) format, from which has been spawned the proliferating "T" (for "training") group movement. Emotional-awareness programs are exemplified by the variety of sensitivity and encounter groups.

The group psychotherapy program is to be further distinguished from what can be termed "human growth" programs, designed for persons who do not conceive of themselves as emotionally ailing, but who do feel the need of group sharing and support in the common exigencies of living.

THEORETICAL CONCEPTS

All group psychotherapy, regardless of the therapist's particular theoretical orientation or operational style, is single-mindedly devoted to the elimination or diminution of emotional symptoms of every individual in the group. There is a bewildering but not chaotic array of theoretical constructs and practical styles that inform contemporary group psychotherapy. These include psychoanalysis, transactional analysis, group-process analysis, existential analysis, client-centered therapy (Rogers), psychodrama, be-

havior modification, and Gestalt therapy, as well as various combinations of these modalities. Although there is wide divergence as to favored style, still there is a fair consensus as to the curative agents-of-change in group treatment. In his definitive text on group therapy, Irvin Yalom¹ lists these as (1) imparting of information, (2) instillation of hope, (3) universality, (4) altruism, (5) corrective recapitulation of the primary family group, (6) development of socializing techniques, (7) imitative behavior, (8) interpersonal learning, (9) group cohesiveness, (10) catharsis.

Yalom's list of curative factors correlate well with those cited by Marmor² as common to dynamic psychotherapies in general: (1) release of tension through catharsis and by virtue of the patient's hope, faith, and expectancy; (2) cognitive learning, both of the trial-and-error variety and of the gestalt variety; (3) reconditioning by virtue of operant conditioning, by virtue of subtle reward-punishment cues from the therapist, and by corrective emotional experiences; (4) identification with the therapist; (5) repeated reality testing, which is the equivalent of practice in the learning process.

GROUP VS INDIVIDUAL ORIENTATION OF THERAPY

Close examination of Yalom's list of curative agents will suggest that the individual participant in group psychotherapy is the beneficiary of two clusters of modifying influences: first, those influences that are dependent upon the group-process itself (cohesiveness, universality, interpersonal learning) which impinge upon everyone in the group; and second, those influences that are relatively independent

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of the group-process (catharsis, corrective recapitulation of the primary family group, insightful information, imitative behavior) which are private, individualized and idiosyncratic.

Recognition of two clusters of curative factors underscores a therapeutic dilemma: Does the therapist treat individuals-in-a-group; does he treat a group composed of individuals; or does he oscillate in his therapeutic focus between individuals and the group-process?

This specific operational issue for group therapists has a more general representation in the therapist's understanding of the nature of psychological-emotional ailments of the human organism. There is general agreement that psychiatric disorders are the consequences of faulty learning, faulty teaching, and faulty adaptation in that earliest interpersonal environment, the family, and to a progressively lesser extent in those successors of the primary family: school, peer group, and society proper. Whatever maladaptive attitudes, expectations, and behavioral patterns might characterize a person's childhood, they are generally incorporated by him in a relatively fixed fashion. Subsequently, it is as though he carried his particular, distorted view of himself-in-the-world wherever he goes, bearing an intrapsychic replica of the primary family inside himself and projecting the corresponding interpersonal replica into whatever segment of society is his at a given moment.

One-to-one psychotherapy, especially psychoanalysis, has focused predominantly on the intrapsychic replica, seeing it both as the seedbed of psychopathology and also as the malfunctioning "organ" which is to be treated and adjusted. Advocates of this approach assume that, to a large extent, one's interpersonal world will become salutary after the skewed intrapsychic replica is revised.

Group psychotherapies, especially transactional analysis and group-process analysis, have focused predominantly on the interpersonal replica, believing that the malfunctioning human organism is more directly and quickly restored to homeostasis (with both external and internal environments) if his social transactions are ameliorated.

The individual (one-to-one) therapies obviously traffic in the minimal "group" of two, and the basic interpersonal nature of that relationship has been recognized in the concepts of projection and transference of the person's attitudes, feelings, and expectations to the therapist. Ordinarily, however, one-to-one therapy proceeds as an intellectual, associational, "mind-centered" operation on the malfunctioning part of that person designated "the patient."

Each person entering group psychotherapy not only brings his maladapted intrapsychic replica for revision, but he exposes that replica inevitably to a variety of real flesh-and-blood persons among whom are males, females, parent types, child types and peer types, all destined to serve him as advocates,

antagonists, and models. He further exposes himself to the vagaries of group mood and morale, discovering perhaps to what a great extent he ordinarily depends on "the others" in life to set his emotional metabolism.

The foregoing delineation of the issue of preferential focus on group-process versus individuals-in-the-group permits a more advanced paraphrase: Does the therapist work primarily on the intrapsychic replica, on the interpersonal replica, or does he deliberately budget his focus between intrapsychic and interpersonal replicas? The therapist must self-consciously adopt one of those policies in order to provide himself with a continually coherent orientation in the therapeutic life of the group.

OTHER THERAPEUTIC ISSUES

Another issue for the group therapist regards his particular role and functions within the group. Is he a director, a social engineer, a catalyst? Is he outside the group as observer and merely potential intervener? Is he inside the group: as a full member, as a limited member, as a special member? Is he active or passive? Are his interventions and interpretations frequent or rare? Many of these questions will be automatically answered in consonance with the therapist's personality set and with the way in which he addresses the previous issue (intrapsychic or interpersonal focus?).

Related to the issue of therapist-function is the question of whether or not the group is better served by co-therapists than by the single therapist. If the co-therapist option is elected what pairing is optimal: one of peers, one of like or different sexes, one with similar or dissimilar theoretical training?

Physical contact

Yet another issue for the group therapist turns on the factor of *the physical body* in the group setting. Whereas one-to-one therapy, and especially psychoanalysis with its minimal visual contact, magnifies the intellectual processes and minimizes the physical realities in the therapeutic relationship, group therapy by its very setting encourages a greater interest in the body and its language. Whereas individual therapy supports intellectualization, formality, and distance (doctor:patient), group therapy promotes informality, proximity, and the dramatic awareness of interpersonal encounter. While psychoanalysis is excessively devoted to insight and encounter-groups are excessively devoted to emotion and body awareness, holistic group therapy carries the possibility of optimal combinations of insight and restoration of psycho-physiological homeostasis.

A compelling auxiliary issue for the group therapist relates to physical contact between the group participants. Should he instate the "no-touch" injunction of psychoanalysis? Should he allow emotionally appropriate embraces? Can he control "controlled

aggression"? Whatever policies are adopted arbitrarily by the therapist or more democratically by the group, the policies regarding physical contact in the group will be beset with inconsistencies, as must be the case in a program committed to insight, openness, spontaneity, body awareness, and adaptational control—variables which appear to operate almost at cross purposes in some instances.

Loci of therapy

A separate issue in group psychotherapy concerns the "loci of therapeutic activity." In the one-to-one psychoanalytic model there is insistence on the encapsulation of the therapeutic relationship, such encapsulation depending on confidentiality on the part of the therapist and agreement by the patient not to share the content of the therapeutic session with spouse, parent, friend, or bar-mate. This guarding of the therapeutic relationship against dissipation appears well justified both on theoretical and practical grounds. Consistent with this policy, extrasessional contacts between therapist and patients are scrupulously avoided.

In group psychotherapy the psychoanalytic model of encapsulation is not possible. Rigorous confidentiality is similarly a part of the group ethos, but it cannot be contractually guaranteed. Furthermore, the logistical assembling and dispersing of the group for each session regularly involves extrasessional exchanges between participants as they arrive at different times and begin to interact piecemeal before the session officially starts, departing later with the possibility of lingering in pairs or subgroups outside the office to continue "unfinished" interaction from the group, all outside the purview of the therapist and the whole group.

Another element in the issue of "loci of therapeutic activity" is the question of combined individual therapy sessions for group members. Does this option provide an adjunct for group therapy or is it more likely to afford a dodge and dilution of the group process?

Special concerns

Participants in group therapy ordinarily bring to the first session all those concerns, rational and irrational, which are familiar to persons entering individual psychotherapy. Additionally, in group therapy there is a predictable series of special concerns and resistances, represented by the following typical questions: How can I be helped by a group of people all of whom also have emotional problems? Wouldn't I do better in individual therapy where I have the therapist's undivided attention? How do I manage to get my proportionate share of therapeutic time without taking someone else's? Will the therapist control the group sufficiently so that I will not be hurt or embarrassed by some unruly member? How can I, or even why should I, disclose my personal

life to a group of "random people"? Isn't group therapy a "second-class" approach for persons who can't financially or emotionally afford individual therapy? One invariable problem in the life-history of a group is that the originally perceived "random people" become, to varying degrees for each participant, "special people." Out of that new perception arises another maladaptive possibility: excessive dependency on the special group as "the only people who really understand and care." This problem is the group analogue to that in individual therapy, in which the therapist emerges as a special and excessively invested person.

OUR PRESENT PROGRAM

Against the background of the theoretical concepts and operational issues cited above, a structural description of the group therapy style presently employed by the authors can now be described.

Although heavily influenced by the psychoanalytic anthropology, our therapeutic approach and style draw most heavily on transactional analysis and gestalt techniques, all combining to provide us an oscillating focus between existential (here-and-now) group-process factors and historical (then-and-there) individual factors.

The two authors regularly function as co-therapists, and their identities in the group are those of "special members," fully available as existential participants, but not at all available as historical participants, in that their personality development and extra-group life is not open to examination. Aside from offering the group participants two differing therapeutic personalities, the authors believe their particular pairing as co-therapists is beneficial because it represents to the group important symbolic polarities: male-female, older-younger, professional-lay.

While the co-therapists are familiar with the background history of each participant, the primary focus in each group session is represented by our literally repetitive question: "What's going on in this room right now?" There is an essential topical interest in the participant's childhood experiences and his contemporary extra-group life, but a constant effort is made to consider those two life-sectors only in correlation with behavior (mental, emotional, motoric, transactional) actually occurring in the group. Because of the invariable tendency for persons to ascribe their life difficulties to other people (from childhood or from the contemporary environment), the co-therapists are very active in insisting on the aforementioned correlation and in discouraging sterile group grumblings about the "bad past" or the "bad present." The co-therapists assume responsibility for encouraging curative transactions and processes in the group and discouraging those communications which reinforce neurotic patterns; otherwise their interventions are infrequent. Participants

generally expect the therapists to "run the show," to allocate time equitably to each person in the group, and to arbitrate differences between group members. A continual effort is made by the co-therapists to disabuse participants of these expectations and to allow them rather to both demand and limit their own time and disclosure.

In regard to physical contact between participants in the group session, our policy is a conservative one in which the therapists insist that no one be exploited. Within that general policy-rule there is tacit permission for occasional affectionate touching and much less frequently for affectionate embraces. Therapeutic application of touching by participants is, in our judgment, limited to instances in which that specific behavior has been phobically avoided, and to instances wherein supportive reassurance is indicated. Such reassurance is itself judiciously limited to stressful situations in which the participant literally cannot find a "solution" within himself (for example, the death of a loved one, radical family ruptures, incurable disease, and other contingent tragedies of living). We overtly discourage any touching which appears as an evasion of other behaviors (verbal or nonverbal) which are more appropriate (productive of autonomy and mutuality) at the moment. The license for aggressive expression is limited to the verbal channel.

The principal issue concerning "loci of therapeutic activity" is met by requesting that all significant emotional exchanges between participants occurring outside the formal meeting time be reported to the group. Problems relative to the other "locus" issue—namely, that of concomitant individual sessions—are met by the therapists' constant vigilance against the participant's using the one-to-one session as a refuge from the group. We discourage concomitant individual sessions for group members unless there is in our judgment, clear justification for that arrangement in terms of emotional fragility; or, as is only rarely the case, in terms of highly confidential content (for example, political, administrative, sexually unusual).

The authors' technical format for group psychotherapy involves once-weekly sessions, each lasting 90 minutes. There is a basic time-limited treatment contract of six months, with individuals' options for unlimited continuation in six month increments. Each group consists of the two co-therapists and eight other participants, preferably divided equally between male and female.

SUMMARY -

We have presented an overview of some major concepts and operational issues in group psychotherapy and a description of our present program.

We believe that the group setting offers some therapeutic benefits which are superior to, some benefits adjunctive to, and some benefits not available to individual psychotherapy. Our goal for each participant is alleviation of symptomatic living-difficulty through (1) recognition of socially maladaptive transactions and communications; (2) identification of the childhood influences in the establishment of maladaptive patterns; (3) recognition of unrealistic expectations of reward and punishment projected onto society generally; (4) recognition of self-demeaning, self-defeating, and self-destructive attitudes and behavior; (5) comparison of the secondary benefits derived from neurotic patterns with the benefits to be derived from more mature patterns; (6) testing of behavioral alternatives in the group setting, (7) increasing familiarity with and comfortable control in the expression of the full gamut of negative and positive feelings; (8) progressive reclamation of demoted physical aspects and physiological functioning; (9) identification of resistances to free, responsible expression of feelings and softening of those resistances which are especially represented in intellectualization and muscular dysfunction; (10) progressive assumption of responsibility for one's own thoughts, feelings, moods, behaviors, and lifestyle; (11) progressive renunciation of excessive dependence and excessive independence in favor of a posture combining interdependence and relative autonomy.

The vehicles we presently view as most productive of this therapeutic sequence are the theories and techniques of psychoanalysis, transactional analysis, and gestalt therapy. Psychoanalytic approaches provide understanding of individual symbol-systems and insight into transference-distortions. Transactional analysis is especially helpful in illuminating skewed communication and maladaptive social relatedness. It additionally provides the principal construct for correlating the intrapsychic and interpersonal replicas. Gestalt techniques are particularly useful in the dissolution of physical and physiological defenses and in the restoration of emotionality.

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Children, while on the breast, are seldom free from eruptions of one kind or other. These are not often dangerous, and ought never to be dried up, but with the greatest caution. They tend to free the bodies of infants from hurtful humours, which, if retained, might produce fatal disorders.—*William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p 377.*

The Abortion Explosion

J. F. Hulka, M.D.

THE medical profession is being drawn inexorably into the performance of abortions. This paper will attempt to review the historical sources of this trend, describe the current situation, and conclude with some estimates as to what to expect in the 1970s.

REASON FOR THE CURRENT EXPLOSION

In 1959 a major technical innovation in methodology of abortion was introduced to the world by the Chinese: vacuum aspiration. At an international meeting on fertility, Chinese from the mainland demonstrated this rapid and safe method of terminating early pregnancies. Russian scientists brought the method to their country, from which it spread through satellite countries such as Hungary, Yugoslavia, and Czechoslovakia. It was adopted in England in the mid-1960s, and a motion picture demonstrating the technique was shown in the United States in 1966. This stimulated interest on the part of both physicians and manufacturers of the equipment. Currently, vacuum aspiration apparatus is advertised widely in obstetrical professional journals, and is emerging in the United States as a method of choice for the interruption of pregnancies before the twelfth week. This technological advance made it possible for concerned individuals throughout the world to look anew at the practice of abortion.

At the same time concern about family planning and the population problem in the mid-1960s led legislators to consider the broad implications of legislation dealing with fertility control, including abor-

tion. An early response to the problem came from the recommendations of the American Law Institute that were passed in Colorado and North Carolina in 1967. That year England enacted a similar law, but included socio-economic reasons as an indication.

The initial impact of these laws was "to make legal what was already going on." The continuation of social concerns, the availability of safe and effective techniques of vacuum aspiration, and the necessity of having to ask not only the relatively simple question, "Who shall be permitted an abortion?" but the far more difficult moral question, "Who should be denied an abortion?" led to increasingly compassionate attitudes on the part of physicians and legislators alike. These attitudes were reflected in the late 1960s by an increase in the incidence of medical abortions.

On the legislative front these considerations led legislators in Hawaii, Alaska, and New York to pass abortion laws which eliminated all restrictive qualifications for the performance of abortion and left the decision in the hands of the patient and the physician. Incidentally, these bills were introduced by Catholic legislators who emphasized that the bill did not necessarily reflect their personal attitude, but that they were acting as responsible legislators rather than as Catholic individuals.

In addition, pressure began to accumulate at the level of the federal courts with challenges to existing laws. The most notable challenge was presented by Dr. Vuitch in Washington, D. C., to a federal court presided over by District Judge Gesell, the son of the famous pediatric psychologist at Yale. Gesell's decision in 1969 upholding Vuitch's right to perform abortions in his office led to a number of similar court challenges which have met with varying success

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throughout the United States. The first case to reach the Supreme Court of the United States was that of *Vuitch*. In April, 1971, the Supreme Court indicated that its decisions were limited to the District of Columbia, that the phraseology of the District of Columbia law was sufficiently and constitutionally clear for a physician to make decisions, but also acknowledged that the physician had the ultimate legal right to decide if an abortion was indicated. The decision placed on the state prosecutor the burden of proving that an abortion has been performed illegally rather than requiring the physician to prove that he has acted legally. This decision suggests that the Supreme Court will recognize the good intentions and good will of legislators in writing laws, but also the good faith and professional competence of physicians in making abortion decisions.

CURRENT STATUS IN NORTH CAROLINA

With these threads of history in the background, we find that in 1968 an estimated 25,000 illegal abortions were performed in North Carolina—or about 25 abortions for every 100 live births. Of women in the reproductive age range, 4 percent underwent abortion. If these figures seem shockingly unrealistic, those from Japan are between 30 and 40 abortions per 100 live births; from Czechoslovakia, between 50 and 60 per 100 live births; and from Hungary, 111 per 100 live births. These societies differ considerably in their attitudes and laws, but the estimate for North Carolina seems modest by comparison. Recent estimates of the number of legal abortions being reported in England (widely noted for its liberalism) indicate that about 6 to 8 abortions per 100 live births occur. This is similar to a recent report from the state of Maryland indicating approximately 5 or 6 abortions per 100 live births.

The discrepancy between the total estimated abortion rate in North Carolina (23 per 100 live births) and the rate of legal abortions (probably 3-4 per 100 live births) represents the gap between those done medically and legally and those done either illegally in North Carolina or legally out of state.

Following New York's official enactment of a permissive abortion law in July, 1970, a large number of clinics sprung up offering complete abortion services for fees ranging between \$50 and \$600. The \$50 abortions have disappeared, and some good services have recently been cut to \$150. Currently, a \$76 round-trip plane ticket from North Carolina to New York, plus \$150 for the abortion, plus taxi fare will come to about \$250—the total cost to a North Carolina resident of having a medically safe, legal abortion in New York. There is no clinic in North Carolina that can compare economically with this service. It is not surprising, therefore, that many women seeking abortions are going out of North Carolina to such centers as New York or Washington, D. C. Early reports from the first eight months' ex-

perience with the New York abortion law reflect this abrogation of our responsibilities to our citizens; approximately half of the abortions done in New York are performed on residents of other states.

PROJECTIONS FOR THE 1970s

Illegal abortions continue; obviously no figures are available as to how many are being performed. At the 1971 Senate Committee hearings on an abortion bill, however, the Durham county health officer displayed three death certificates of mothers from Durham county whose deaths were traced to illegal abortions. These deaths will continue despite our laws. The phenomenon of illegal abortions when legal ones are available is an established part of human nature. Estimates from England, Japan, Czechoslovakia, and even Hungary and Yugoslavia, indicate that about half of all women would rather go to a private, unofficial, non-reporting doctor for an abortion than to an official part of the "system." Privacy in this matter is often a highly prized ingredient, paid for in increased risk and cost to the patient.

It can be anticipated that with the improvement of available techniques, even the illegal abortions will result in fewer deaths. A recent report from California indicated dramatically that there were no deaths from septic abortion in the San Francisco Bay area in 1970, in sharp contrast to the situation in 1967 when abortion was the leading cause of death in San Francisco among pregnant women.

With regard to abortions, the State of North Carolina is probably more similar to Maryland and England than to countries such as Hungary and Japan. It is likely that this state will settle at a rate of 6 to 8 medical legal abortions per 100 live births, or somewhere between 6 to 8 thousand medical abortions annually.* This will leave between 15,000 and 20,000 women to seek abortions out of the state or obtain them illegally.

Another result of the increased availability of abortions will be the decreased availability of babies for adoption. Approximately 10 percent of all married couples are infertile. In years past a solution to their desire for parenthood has been adoption. Currently, the adoption agencies in North Carolina are discouraging new applicants because of a large existing backlog of applications (for example, 200 in Greensboro). Consequently, prospective parents face an extremely long waiting list before a suitable child becomes available through these agencies. A recent estimate of the number of children available for adoption in North Carolina suggests that the number has decreased by about one third over previous years. This has also been felt the last year among East and West Coast adoption agencies as well. Adoption agencies still have older children, chil-

* Figures reported by the State Health Department one year after presentation of this paper indicate that about 6,000 abortions are currently being performed annually.

dren with some medical defects and children of mixed nationalities available for adoption. Nevertheless, the reduction in "ideal" children available for adoption should make us pause to reflect upon the meaning of the concept "unwanted child" as a justification for pregnancy interruption.

Hopefully, abortion will find its proper role in our efforts to regulate fertility as an unfortunate but necessary backstop for some contraceptive failures. The intrauterine device, at best, has a 1-3 percent annual failure rate. Birth control pills actually have a higher failure rate when used by real human beings rather than experimentally controlled subjects. Other methods of contraception including the mechanical and rhythm methods have still worse failure rates. As a result, pregnancies will continue to occur as contraception failures as they have throughout mankind's history. Let us hope that the placing of abortion into medical hands will allow us to look upon these patients as women in need of more adequate contraception.

Recent experiences in North Carolina Memorial Hospital has indicated that about half of the women seeking abortion will accept IUDs to be inserted at

the time of pregnancy interruption. This is among patients two thirds of whom are unmarried and pregnant for the first time. Among those married with completed families, somewhere between 30 and 50 percent of such couples seeking abortion will accept sterilization. Sterilization is currently being offered by laparoscopy. In England, at least one clinic is offering a "package deal" of abortion for the female and vasectomy for the male, as a demonstration of equal sharing of responsibility and medical risk-taking to meet the couple's fertility problem.

CONCLUSION

If we as physicians will look upon the coming tide of unfortunate but unavoidable medical abortions as indications for better contraceptive or sterilization advice to prevent unwanted pregnancies from recurring, I am optimistic that the removal of artificial abortions from the illegal, nonmedical field to the legal medical area will, in the long run, result in a reduced need for abortion.

References supporting the data presented in this paper are available on request.

It is very certain that high living prevents fecundity. We seldom find a barren woman among the labouring poor, while nothing is more common among the rich and affluent. The inhabitants of every country are prolific in proportion to their poverty; and it would be an easy matter to adduce many instances of women, who, by being reduced to live entirely upon a milk and vegetable diet, have conceived and brought forth children, though they never had any before. Would the rich use the same sort of food and exercise as the better sort of peasants, they would seldom have cause to envy their poor vassals and dependants the blessing of a numerous and healthy offspring, while they pine in sorrow for the want of even a single heir to their extensive domains. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 368.*

Editorials

THE FALL 1972 EXECUTIVE COUNCIL MEETING

There probably never has been a more splendid Carolina Fall day than Sunday, October 1, but it was a day indoors for the Executive Council, gathered to hear reports from the committees and commissioners, and to take care of all other business accumulated since the May meeting. Almost all committees had met prior to the Council meeting, and all commissioners were on hand to present the reports of their committee groups.

Mrs. Torben Seear, Auxiliary President, reported that the Auxiliary is marking its 50th year with the theme of participation, which has really been an objective all through that period. At present their group has 2,699 members, 265 of them newly joined in the past year. Most of these ladies are members of one of the 49 chapters organized in connection with 65 county societies. About 1,000 wives of Society members do not belong to the Auxiliary, and heightened efforts will be made to gain their participation. The Auxiliary continues to enjoy the new Headquarters building, finding it ideal for their meetings. Not only is the building a great help, but they are proud of the job done by the print shop in producing their handbook, "Guideposts."

Dr. Tilghman Herring, whose Committee on Finance watches over the Society's money, reported that by the end of 1973 the Society will own the Headquarters building free and clear of debt. Temporary use of operational funds makes the building currently free of debt, but borrowing will be necessary in early 1973; it is this debt which should be retired for good next year. The budget was reviewed item by item to assure that the Council had a clear idea of where funds were being spent. The Society's property near the Raleigh-Durham airport is not yet sold, although an option is currently on it, to expire in December.

Dr. Joseph Combs, reporting for the Board of Medical Examiners, said that a joint committee composed of members from the Nursing and Medical Boards had been formed. This group will try to work out ways in which the extended duties being assumed by nurses could be encompassed under existing authority granted the groups, rather than through new legislation. A new development was the announcement by the federal government that in

their opinion the federal supremacy clause of the Constitution allows regulation of medicine on a federal, rather than a state, basis. Thus Washington authorities claim that who practices medicine, and how they practice it, is within their purview. There will be a meeting of legal representatives of State Boards in November, and our Board will be represented.

The Council on Review and Development reported through its chairman, Dr. Louis Shaffner; this Council monitors the functions of the various parts of the Society, suggesting formation of new committees where needed, but also termination of ones which are no longer needed. Thus the Negotiations Committee may be phased out, while the Legislation Committee may be divided into state and national subcommittees. In the discussion of Society organization the Council was told that there was no connection between the Society's Drug Abuse Committee and a political ad involving doctors and drug abuse which had appeared shortly before the meeting. The Council was also told that the Society has not yet adopted any position on unionism for physicians.

Dr. John Watson reported on the Society's continuing effort to work with physician's associates as their relationships with the profession become better defined. There are relatively few of these men and women working in the state, and they have a hard time finding opportunities for continuing education. Dr. Watson's committee is looking into a mechanism by which the Society could have them attend sessions at our meetings. Since the Nursing Committee has similar concerns with the expanded role of nurses, this matter was referred to them.

Dr. Herring returned to give the Administration Commission report, a main item being the presentation by the Society's malpractice carrier, St. Paul Fire and Marine Insurance Company, of their need for a 33 percent increase in rates, occasioned by increased claims and claims costs. Dr. Burwell's Professional Insurance Committee looked thoroughly into the request, and finds that St. Paul's projected rate is still below the standard rate charged by almost all other companies.

Several proposals emanating from Dr. Mary Margaret McLeod's Public Service Commission were supported by the Council, all with a lot of discussion beforehand. One was the previously stated po-

sition that abortion was a matter for a woman and her physicians to decide, without the father's consent being necessary. The multiphasic screening program operated by the State Board of Health is to be enlarged. The present Board of Health policy of giving INH to tuberculin-reacting children up to age 6 will be extended up to age 20. The monthly publication of perinatal and maternal mortality statistics will be stopped. Legislative changes will be sought in the immunization laws which now restrict the Board of Health and the profession generally in adapting to changing recommendations based on current research.

The Public Relations Commission, under Dr. John McCain, had some proposals supported and one voted down, involving the first time (in the memory of those present) that the President had to break a tie. To take the negative matter first, it was a proposal originating in the Board of Health that mandatory serologic testing for syphilis be dropped from the premarital examination requirement and left to the discretion of the physician. The incidence of positive tests is less than 1 per 10,000, only 17 cases being found last year, at a cost of \$4,600 per case, more than the cost of finding a case of cervical cancer through Pap testing. The Council divided evenly on the merits of seeking legislative relief from this requirement, President Glasson deciding the issue with a "no" vote. The Commission was backed in opposing the proposal by the Bureau of Narcotics and Dangerous Drugs to eliminate from cough syrups the small amounts of opium derivatives now present in some. Guidelines for eye benefits under public programs were passed. A radio system for communication between ambulances and hospitals was approved. The possibility of indicating on hospital admission forms that the patient has signed an anatomical gift form was to be investigated; this would permit prompt harvesting of organs, something which is now difficult.

Once again, the Professional Service Commission, under Dr. Howard Wilson, has returned to the old battle to have the Industrial Care Commission accept the usual and customary fee principle, something for which they have the statutory authority. Since the large industries of the state have lower insurance rates due to the subnormal medical fees the

Commission allows, this attempt will face the usual strong opposition.

Dr. Josephine Newell, as usual, presented her Annual Convention Committee report with the spirit and good humor for which she is noted. The annual meeting will be at the Carolina in Pinehurst at least until 1977, no other hotel in the state being able to accommodate our meeting. An attempt will be made to streamline the Sunday afternoon activities of the House of Delegates. A central theme will be sought for all general sessions, which will be tape recorded. The best presentation by a medical student or house officer will be awarded a prize given by the Durham-Orange Society.

The Advisory and Study Commission led by Dr. Roy Bigham told the Council that the long-awaited history of the Society will be available by November 15, with the first 500 copies being autographed by Dr. Roscoe MacMillan, the accoucheur of this project during one of the longer recorded labors. With some dissent approval was given for nurses to take Pap smears. Dr. Jesse Meredith's committee advisory to the Department of Motor Vehicles reported that visual field testing by driver's license examiners has begun as a pilot project, and in 4 years all licensees will be having their visual fields tested. The state hospitals are reporting about 8,000 commitments of drivers per year to the Department, under a new law.

A major concern of Dr. George Paschal's Developing Government Health Programs Commission was the forthcoming projected strict enforcement of regulations governing skilled nursing care homes. It was felt that some of the requirements are unrealistic, and might result in closing more than 90 percent of those facilities now operating in our state; perhaps only 10 would remain open. Our congressional representatives will be notified of our concern. The Council approved the establishment of a medical peer review foundation in the state.

Having started at 9 a.m., just when the fine quality of the day became obvious, the meeting closed after 6 p.m., when it was equally obvious there was only day enough left to get home. The actions of the various Society groups, having gone through the Council, now go on to more work for a lot of people, with the good hope of eventual benefit for public and profession alike.

The most fatal disorder consequent upon delivery, is the puerperal, or childbed fever. It generally makes its attack upon the second or third day after delivery. Sometimes indeed, it comes on sooner, and at other times, though rarely, it does not appear before the fifth or sixth day. — *William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 364.*

Bulletin Board

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 Caudle, John Allen (P), 1928 Randolph Rd., Charlotte 28207
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 Green, David Lot (Or), 4761 Shron Court, Winston-Salem 27103
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 Pedersen, Arthur Morris, Gaston Mem. Hospital, Gastonia 28052
 Price, Robert Edwin, Jr. (NS), 1830 Hillandale Rd., Durham 27705
 Rundle, T. J. (Oph), 1142 N. Road St., Elizabeth City 27909
 Vogt, Clifford John, Jr. (S), 1432 Ferncliff Rd., Charlotte 28211
 Watts, Nelson Barnett (I), 21 Glenview Rd., Asheville 28804
 Willey, Harry Swain (S), P. O. Box 3, Currituck 27929

WHAT? WHEN? WHERE?

In Continuing Education November, 1972

Starting this month, "place" and "sponsor" will be indicated only when these differ from source of information.

I. Current Events in North Carolina Nov. 16-17

Annual School of Medicine Symposium, "Current Concepts in Clinical Pharmacology"
 For Information: School of Medicine, UNC, Chapel Hill, N. C. 27514.

Nov. 17-18

Annual Meeting of the North Carolina Chapter of the American Academy of Pediatrics and the North Carolina Pediatric Society
 Place: The Carolina, Pinehurst
 For Information: Mrs. John McLain, 3209 Rugby Road, Durham 27707

Nov. 28-Dec. 1

Head and Neck Anatomy; third post graduate course
 Sponsors: Department of Anatomy with Division of Continuing Education
 Open to those holding following degrees: M.D., D.D.S., D.M.D., Ph.D.
 Registration limited to 16.
 Fee: \$200; students in residency \$100.
 For Information: Division of Continuing Education, East Carolina University, P. O. Box 2727, Greenville 27834

Nov. 21 through Jan. 23

The Department of Medical Education of the Edgecombe General Hospital and the Tarboro Clinic, with the assistance of the University of North Carolina School of Medicine and the Duke University Medical Center, has arranged for a series of comprehensive continuing education study programs on "THE CARE, DIAGNOSIS, TREATMENT, AND MANAGEMENT OF PULMONARY DISORDERS." All area physicians and allied professionals are invited to participate in the study programs. For each program there will be a lecture from 1:30-2:30 p.m. and consultation 2:30-4:30 p.m.
 "Management of Hilar Lymphadenopathy," Nov. 21, 1972
 "Management of Sarcoidosis and Fungal Infections," November 28, 1972
 "Upper Respiratory Infections — Diagnosis and Management," December 5, 1972
 "Acute Respiratory Failure—Care and Treatment," December 12, 1972
 "Management of Respiratory Distress in Newborn Infants," December 19, 1972
 "Operational Expertise for Pulmonary Lab Technicians," January 9, 1973

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NORTH CAROLINA BLUE CROSS AND BLUE SHIELD, INC.

"Drug Therapy and the Treatment of Pulmonary Disorders," January 16, 1973
 "Role of Allied Professionals in Care and Treatment of Pulmonary Disorders," January 23, 1973
 All lectures will be held in the Edgecombe Hospital Learning Lab (Conference Room).
 For Information: The Department of Medical Education, Edgecombe General Hospital, Post Office Box 45, Tarboro, North Carolina 27886, Telephone: 823-4101, extensions 351 or 313.

II. Coming Events in North Carolina

Dec. 1-2

Annual NCSIM-ACP Meeting
 Place: Red Carpet Inn, Charlotte
 For Information: Dr. E. Tom Marshburn, 3008 Oleander Drive, Wilmington 28401

Dec. 8-9

Second Annual Reynolds Seminar in Medicine, "Myocardial Infarction, 1972"
 Place: Babcock Auditorium
 For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

Jan., 1973

Ophthalmology Seminar
 For Information: UNC School of Medicine, Chapel Hill 27514

Jan. 26-27, 1973

Third Annual Surgical Symposium, "Surgical Emergencies"
 Place: Babcock Auditorium
 For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem, 27103

III. Out of State (through February, 1973)

Nov. 1-3

Competitive Protein Binding and Radioimmuno Assay in Clinical Chemistry, Seminar Series
 Sponsored by: Department of Pathology
 For Information: Department of Continuing Education, Health Sciences Division, Box 91, Medical College of Virginia, Richmond, Virginia 23219

Nov. 4

Georgia Regional Meeting, American College of Physicians
 Place: Grady Hospital, Atlanta, Georgia
 For Information: Edwin C. Evans, M.D., 340 Boulevard, N.E., Atlanta, Georgia 30312

Nov. 8-10

Pediatrics
 For Information: University of Tennessee College of Medicine, 800 Madison Avenue, Memphis, Tennessee 38103

Nov. 10

The Sesquicentennial Conference on Inherited Mental and Motor Disorders
 For Information: Charles N. Still, M.D., Chief, Neurology Services, William S. Hall Psychiatric Institute, Bull Street at Colonial Drive, Columbia, South Carolina
 Attendance limited to 220 persons. Notify Dr. Still if you wish to attend.

Nov. 10-11

Emergency Medical Services
 Co-sponsor: Tennessee Mid-South RMP
 For Information: Vanderbilt University School of Medicine, Division of Continuing Education, 110 21st Ave., S., Nashville, Tennessee 37203

Rondomycin® (methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines

WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**

Usage in pregnancy. (See above **WARNINGS** about use during tooth development.) Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.

Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)

All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in premature given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.

Tetracyclines are present in milk of lactating women taking tetracyclines.

To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The antianabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.

Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.

PRECAUTIONS: It superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.

In venereal diseases, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.

Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).

Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.

Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.

ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis inflammatory lesions (with monilial overgrowth) in the anogenital region.

Skin: maculopapular and erythematous rashes, exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).

Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).

Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.

Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.

Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.

Over prolonged periods, tetracyclines have been reported to produce brown-black microscopical discoloration of thyroid glands, no abnormalities of thyroid function studies are known to occur.

USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea. In uncomplicated gonorrhea, when penicillin is contraindicated, "Rondomycin" (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.

For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of "Rondomycin" (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.

Eaton Agent pneumonia. 900 mg daily for six days.

Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.

Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.

Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.

In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.

In streptococcal infections, a therapeutic dose should be given for at least 10 days.

SUPPLIED: "Rondomycin" (methacycline HCl): 150 mg and 300 mg capsules, syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev 12/71



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Nov. 30-Dec. 1

South-Wide Symposium on Human Nematode Intestinal Parasites

Place: Atlanta, Georgia

For Information: James W. Follette, Project Assistant, Malnutrition and Parasite Project, 002 Maxcy College, University of South Carolina, Columbia, South Carolina 29208

Dec. 1

Ware Residents Programs

Place: School of Medicine, MCV

For Information: Department of Continuing Education, Health Sciences Division, Box 91, Medical College of Virginia, Richmond, Virginia 23219

Dec. 8-9

Current Concepts in the Treatment of Infectious Diseases
Co-sponsor: Center for Disease Control, Atlanta

For Information: Medical University of S. C., 80 Barre St., Charleston, S. C. 29401

Dec. 14-15

Otolaryngology for the Family Physicians

For Information: University of Tennessee College of Medicine, 800 Madison Avenue, Memphis, Tennessee 38103

Dec. 19

Course in Oral Surgery-Surgical Orthodontics

Co-sponsor: Tennessee Mid-South RMP

Fee: \$50

For Information: Vanderbilt University School of Medicine, Division of Continuing Education, 110 21st Ave., S., Nashville, Tennessee 37203

Jan. 5

Medicine & Religion Symposium

For Information: Medical College of Georgia, 1459 Gwinnett St., Augusta, Georgia 30902

Jan. 8-10

Three Days of Liver Disease

Place: Royal Coach Motel, Atlanta

Co-sponsor: Emory University

Fee: \$80 ACP members, FACP, residents, & resident fellows: \$40 Assoc.; \$125 nonmembers

For Information: American College of Physicians, 4200 Pine St., Philadelphia, Pa. 19104

Jan. 8-11

The Alton D. Brashear Postgraduate Course in Head and Neck Anatomy

Place: School of Medicine

Sponsored by: Department of Anatomy

For Information: Department of Continuing Education, Health Sciences Division, Box 91, Medical College of Virginia, Richmond, Virginia 23219

Jan. 14

Principles in Diagnosis & Treatment of Infectious Disease

Co-sponsor: University of Tennessee College of Medicine

For information: Jackson-Madison County General Hospital, 708 W. Forest, Jackson, Tennessee 38301

Jan. 25-26

Clinical Psychiatry

Fee: \$50

For Information: Medical College of Georgia, 1459 Gwinnett St., Augusta, Georgia 30902

Feb. 22-23

Twenty-Sixth Annual Stoneburner Lecture Series

Sponsored by: Division of Urology in cooperation with the

Department of Continuing Education

For Information: Medical College of Virginia, Health Sciences Division, Box 91, Richmond, Virginia 23219

News Notes from the—

**BOWMAN GRAY SCHOOL
OF MEDICINE
WAKE FOREST UNIVERSITY**

Dr. Joseph E. Johnson III, professor of medicine and chief of the Division of Infectious Diseases and Immunology at the University of Florida College of Medicine, has joined the faculty of the Bowman Gray School of Medicine as professor and chairman of the Department of Medicine.

He succeeds Dr. Ernest H. Yount, who resigned the chairmanship to return to full-time teaching, research and patient care. Dr. Yount, who has headed the department for the past 20 years, will remain on the faculty as professor of medicine.

Dr. Johnson, a noted specialist in infectious disease and immunology, was named associate dean of the University of Florida College of Medicine two years ago. He formerly served as assistant dean for student affairs at Johns Hopkins University School of Medicine.

Dr. Johnson's primary research interests lie in the cause of and immunization against infections, and in adverse drug reactions. His recent research has dealt principally with cellular defense mechanisms in the lung.

He holds the B.A. and M.D. degrees from Vanderbilt University where he was elected to Phi Beta Kappa and Alpha Omega Alpha. He completed residency training at Johns Hopkins Hospital where he was chief resident in the Osler Medical Service.

He is a Markle Scholar in Medical Science.

* * *

The Physician's Assistant Training Program of the Bowman Gray School of Medicine is one of the first 17 such programs to be formally accredited by the American Medical Association's Council on Medical Education.

The action was taken in collaboration with the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians, and the American Society of Internal Medicine.

The Bowman Gray program was one of only four that received full approval. Full approval is awarded to programs that have graduated students.

Nine other programs were given preliminary approval and four programs received provisional approval.

* * *

The Bowman Gray School of Medicine has been

awarded a \$74,295 student aid grant from the Robert Wood Johnson Foundation of Princeton, N. J.

The grant was made under the foundation's nationwide student aid program to increase the number of future doctors likely to practice in medically underserved areas.

Dr. C. Douglas Maynard, associate dean for student affairs, said the grant will provide support over the next four academic years for scholarships and loan funds to women students, students from rural backgrounds, and students from minority groups.

The foundation focused on these groups on the basis of evidence that they are likely to choose practice locations in the nation's underserved rural and inner-city communities upon the completion of their professional studies.

* * *

Eighty-nine first-year medical students have enrolled for the 1972-73 academic year at the Bowman Gray School of Medicine. It is the largest entering class ever accepted by the medical school.

The first-year class, which includes students from 20 states, was selected from a record 3,607 applicants. Forty-five of the students are from North Carolina.

The class size represents an increase of 13 students over last year's entering class, and an increase of 35 over the number accepted in 1966. Total en-

rollment this year is 316 students and 62 graduate students.

* * *

The Bowman Gray School of Medicine has been awarded a federal contract of \$130,848 to support its Physician's Assistant Program.

The contract was one of 25 awarded to institutions in 20 states in a national effort to train physician's assistants to serve in primary care situations.

The contracts were awarded by the Bureau of Health Manpower Education, the major education component of the National Institutes of Health. Contracts are renewable each year for a four-year period.

Dr. Leland E. Powers, director of the physician's assistant program at Bowman Gray, said the contract will permit expansion and improvement of his program. While the bulk of the contract money will go for operational and instructional purposes, a small block of the funds will be used for student aid, he said.

* * *

Dr. Clark E. Vincent, professor of sociology and director of the Behavioral Sciences Center of the Bowman Gray School of Medicine, has been elected president-elect of the American Association of Marriage and Family Counselors.

He has also been chosen chairman-elect of the American Sociological Association's Family Section.

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GEORGE S. FULTZ, JR., M.D.

CATHERINE T. RAY, M.D.

Dr. Vincent thus becomes the first man to head the four major marriage and family organizations in the country.

He has been president of the National Council on Family Relations and national chairman of the Groves Family Conference.

He will be installed as chairman of the Family Section of the American Sociological Association next August in New York City. The American Association of Marriage and Family Counselors has not yet determined where or when its 1973 annual meeting will be held.

* * *

Clyde Hardy, associate dean of the Bowman Gray School of Medicine, has been installed as president of the American College of Clinic Managers.

The installation came during a September meeting of the college and the Medical Group Management Association in Atlanta, Ga.

Hardy, director of the medical school's Department of Clinics, is one of the few clinic administrators to serve as president of both the college and the association. He was president of the association in 1962-63.

* * *

Dr. David R. Mace, professor of family sociology at the Bowman Gray School of Medicine, recently returned from Geneva, Switzerland, where he spent the month of September as a special consultant to the World Health Organization.

He had been asked by WHO to help prepare a conference on the training of physicians and other health personnel in the field of human sexuality.

Dr. Mace wrote a position paper that was discussed at the Conference and worked with the WHO secretariat in preparing a report of the meeting.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

A novel exchange of personnel between UNC at Chapel Hill and the Health Services and Mental Health Administration (HSMHA), of the U.S. Department of Health, Education, and Welfare, has been announced by Dr. Cecil G. Sheps, UNC vice chancellor for health sciences.

Representatives of the two organizations will exchange places for a period of at least one year as part of a unique collaborative venture to expand and improve the evaluation of health programs nationally, Dr. Sheps said.

Dr. Sheps explained that the exchange activity is an integral part of UNC's new Program in Health Services Evaluation. The University and HSMHA recently signed a \$1.3 million contract to fund the first

18 months of what will be at least a five-year program, he said.

* * *

A \$534,986 grant to the University of North Carolina has been approved to fund the UNC Child Development Institute, one of the nation's 12 Mental Retardation Research Centers, it was announced by Dr. Cecil G. Sheps, Vice Chancellor for Health Sciences and director of the institute.

Earmarked as a "core grant," these funds, from the National Institute of Child Health and Human Development, represent the first of five years of approved support totaling \$2,346,362. These monies will be used to meet basic operating costs and to implement new research programs within the Institute from now until 1977.

Dr. Sheps said, "This substantial increase in basic support for the University's research program in child development and retardation is a tribute to the excellent base of research activities that has been developed by the faculty in the two broad interrelated areas, the socio-psychological-educational disciplines and the biological disciplines.

Established in 1967, the Institute's role is to bring together into a single, major research program a number of scientists working in the fields of mental retardation and child development.

The Institute consists of two physically separate, but closely coordinated research centers each focusing on different aspects of child development.

* * *

The American Psychiatric Association recently tapped the UNC Medical School's Child Research Project here as winner of one of three Gold Awards for outstanding achievement in treatment programs for the mentally ill.

The first Gold Award ever to come to North Carolina was presented to Dr. Eric Schopler and Dr. Robert Reichler, founders and co-directors of the program, at the Association's annual awards session in St. Louis.

The program developed by Drs. Schopler and Reichler was designed to help psychotic children lead more normal lives.

The success of the project has resulted in a state-supported program for children with a broad range of developmental and behavior disorders.

A part of the department of psychiatry and Child Development Institute of the University of North Carolina School of Medicine, the project was first established in 1967 with a grant from the National Institutes of Mental Health.

Its purpose has been to study and identify early signs of childhood psychosis or autism, to develop educational and treatment techniques to aid in the child's recovery, and to improve the equilibrium of families with a psychotic child.

"An Intimate Marriage" and "Black Medical Practice and Folklore" were two of the topics ex-

pled here in October at the UNC School of Medicine's Symposium on Medicine and Religion.

Featuring experts in the fields of medicine, religion and education, the symposium focused on medical, ethical, and legal issues in modern medicine.

The two-day session was presented by the American Medical Association's Department of Medicine and Religion, the Medical Society of the State of North Carolina's Committee on Medicine and Religion, and the UNC School of Medicine.

* * *

Dr. Arthur J. Prange, Jr., professor of psychiatry and director of Psychiatric Research Development in the UNC School of Medicine here, has been appointed to the Clinical Projects Research Review Committee of the National Institute of Mental Health.

This is one of several committees which receive grant applications from throughout the country and is charged with judging their merit and making recommendations for federal financial support.

* * *

The UNC School of Medicine has received a \$95,000 student aid grant from the Robert Wood Johnson Foundation

Dr. Christopher C. Fordham III, dean of the Medical School, said terms of the grant stipulate that

funds provided by this program will be used as financial aid to women students, students from rural backgrounds, and those from this country's Black, Indian, Mexican American and mainland Puerto Rican populations.

The UNC funds are part of \$10 million made available by the Robert Wood Johnson Foundation to medical schools across the nation for improving access to physician services in rural areas and inner-city poverty areas.

* * *

Three members of the UNC Department of Surgery were featured at the American College of Surgeons meeting held in San Francisco in October.

Dr. Colin G. Thomas, Jr., chairman of the Department, and Dr. George Johnson, Jr., chief of the Division of Vascular and Traumatic Surgery, reviewed movies.

James L. Frey, Jr., research technician in the Division of Vascular and Traumatic Surgery, presented a paper entitled "Rapid Increase in Red Cell, 2, 3, DPG in Hypoxic Rabbits Following the Infusion of Inosine, Pyruvate and Inorganic Phosphate." The paper was co-authored by Dr. Herbert J. Proctor, assistant professor in the division.

* * *

Dr. Cecil G. Sheps, UNC vice chancellor for health sciences here, has been named chairman of a

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national Commission for the Study of Higher Education for Public Health.

The announcement was made at the organization's first meeting recently in New York by Dr. L. E. Burney, president of the Milbank Memorial Fund, an organization whose stated aim is to improve the physical, mental, and moral conditions of humanity.

Dr. Sheps said the three-year study will seek to develop a plan to help meet the nation's needs for knowledge and skill in identifying and understanding the factors which influence the health of the public.

The study will be conducted by a national commission consisting of distinguished experts drawn from the fields of public health, higher education, public policy, and related fields.

* * *

Dr. Arthur J. Prange, Jr., professor of psychiatry and director of psychiatric research development, has been elected to membership in the Royal College of Psychiatrists.

Non-British membership in the College is reserved for psychiatrists who have contributed to the practice or theoretical basis of British psychiatry.

During the years 1968-1969, General Practitioners Research Group confirmed an original finding by Dr. Prange and his colleagues, Drs. Morris A. Lipton and Ian C. Wilson, that in many depressed women a small dose of thyroid hormone will accelerate the action of certain standard antidepressant drugs. As a consequence the recovery time from this common condition is reduced by about one half.

* * *

Dr. Walter E. Stumpf, internationally recognized for his contributions in the areas of sex hormone action on the brain and other tissue, was featured speaker recently at the Instituto Mexicano Del Seguro Social in Mexico City.

He presented three lectures concerning UNC's studies on sex steroid hormone actions on reproductive organs.

Dr. Stumpf is an associate professor of anatomy and pharmacology in the UNC School of Medicine and Laboratories of Reproductive Biology.

* * *

Dr. Daniel A. Okun, an outspoken critic of environmental abuse and one of the nation's foremost ecologists, was honored Oct. 10 in Atlanta with a special award from the American Academy of Environmental Engineers.

Dr. Okun, chairman of the UNC School of Public Health's department of environmental sciences and engineering, received the coveted Gordon M. Fair Memorial Award at the annual meeting of the Water Pollution Control Federation.

President of the Academy two years ago, Dr. Okun was honored for his "achievements in leadership, research and management which deserves the highest recognition by his peers."

Dr. John E. Larsh, associate dean of the University of North Carolina School of Public Health, has been elected president of the International Commission on Trichinellosis, which has members in 23 countries.

Dr. Larsh is professor and chairman of the UNC School of Public Health's Department of Parasitology and Laboratory Practice. He will be executive director of the Third International Conference on Trichinellosis to be held in Miami Beach in November. The first two conferences were held in Poland.

* * *

A program to train family doctors established at the University of North Carolina School of Medicine and the North Carolina Memorial Hospital has been approved by the family practice residency review committee of the American Medical Association.

The implementation of the program to train the family doctors is an integral part of a broader program at the University designed to improve the health care of the people of North Carolina. These programs include a spectrum of educational, research, and service activities. It is expected that this new residency program for family physicians will play an important role in the Medical School and Hospital program to help improve the medical care available to the people of the state.

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

A total of 114 students are in the class of 1976 at the Duke School of Medicine.

The 96 men and 18 women comprising this year's freshmen were selected from a record number of 3,151 applications, almost a 47 percent increase over last year.

The students come from 25 states. North Carolina has the largest state representation with 30 students; Georgia follows with 11. Virginia and New York have 9 and 8 students, respectively. Thirty members of the class are Duke graduates.

The size of the class has been expanded by nine over that of 1971.

For the seventh year a curriculum which provides more flexibility in medical education will be followed. The program consists of two core years, the first in basic sciences and the second in clinical work at the hospital. The third and fourth years are made up entirely of electives in both the basic and clinical sciences.

Students from North Carolina are: George R. Dixon, Michael R. Geer, Charles H. Livengood III, J. Stuart McCracken, Stuart H. Manning and Robert D. Williams of Durham; Ralph H. Beaumont, Robert M. Tate, and Sigmund I. Tannenbaum of

Greensboro; Barbara L. Blaylock and Samuel R. Fisher of Winston-Salem; John D. Cheesborough and Richard E. Koon of Asheville; James H. Cooke, Jr., of New Bern; Norris W. Crigler, Jr., John W. Jones, Ted S. Keller, and Robert M. Lipscomb of Charlotte.

Also Michael W. Dae of Raleigh; Bonnie K. Hinkle of Welcome; Russell J. Kilpatrick of Asheville; Robert V. Lamb of Southern Pines; John W. Neal of Hamlet; Britain W. Nicholson of Chapel Hill; Robert C. Singler of Cary; Edward L. Treadwell of Garland; Giles W. Vick III of Monroe; Robert L. Williams of Wilmington; Margaret E. Williford of Lillington; and Frank Worriax of Hillsborough.

* * *

The School of Medicine has received an \$86,383 grant from the Robert Wood Johnson Foundation of Princeton, N. J.

It is part of the foundation's nationwide student aid program to increase the number of future doctors likely to enter practice in medically underserved areas.

Dr. Thomas D. Kinney, director of medical and allied health education, said the grant provides support over the next four academic years for scholarship and loan awards to women students, students from rural backgrounds, and those from the country's black, Indian, Mexican-American, and U. S. mainland Puerto Rican populations.

Individual recipients and the amounts will be determined by the School of Medicine.

* * *

Dr. George L. Maddox, a man who has been closely associated with the Center for the Study of Aging and Human Development for 12 years, has been named director of the center.

Maddox, professor of medical sociology, succeeds Dr. Carl Eisdorfer, who resigned recently to become chairman of the Department of Psychiatry at the University of Washington School of Medicine, Seattle.

The new center director said he hopes to stimulate new programs in the basic science departments that will yield new information regarding the cause and control of chronic disease among the aged.

Similarly, he plans to foster a more effective integration of "what we are learning about the aged with the training of physicians, nurses, medical technicians, and administrators of health care facilities."

Maddox expects to explore the potential of community colleges in training new types of service personnel who will be needed to provide the increasing variety of services to the aged now being developed.

"We also plan to give increased attention to improving the care in nursing homes and intermediate care facilities in which so many older people ultimately find themselves," he said.

A native of McComb, Miss., Maddox came to Duke in 1960 from Millsaps College where he was

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Indications: Nonobstructed urinary tract infections (mainly cystitis, pyelitis, pyelonephritis) due to susceptible organisms. **Important Note:** *In vitro* sensitivity tests not always reliable; must be coordinated with bacteriological and clinical response. Add aminobenzoic acid to follow-up culture media. Increasing frequency of resistant organisms limits usefulness of antibacterial agents, especially in chronic and recurrent urinary infections. Maximum safe total sulfonamide blood level, 20 mg/100 ml; measure levels as variations may occur.

Contraindications: Hypersensitivity to sulfonamides; infants less than 2 months of age; pregnancy at term and during the nursing period.

Warnings: Safety in pregnancy not established. Do not use for group A beta-hemolytic streptococcal infections, as sequelae (rheumatic fever, glomerulonephritis) are not prevented. Deaths reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. CBC and urinalysis with careful microscopic examination should be performed frequently.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy or bronchial asthma. Hemolysis, frequently dose-related, may occur in glucose-6-phosphate dehydrogenase-deficient patients. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; *Miscellaneous reactions:* Drug fever, chills and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

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2 to 4 tablets *q.i.d.*



ROCHE

chairman of the Department of Sociology.

He received his B.A. degree from Millsaps College, his M.A. from Boston University, and his Ph.D. at Michigan State University.

* * *

A fourth-year medical student is the recipient of a \$1,000 scholarship from the International College of Surgeons.

Martin J. Conley, Jr., of Fort Lauderdale, Fla., received the prestigious award upon his return from England, where he spent the summer studying congenital heart disease at the Great Ormond Street Hospital for Sick Children under Dr. David Waterston, a pioneer in the field.

The purpose of the scholarship is to enable promising medical students with the intention of becoming surgeons to pursue their studies in either general surgery or the surgical specialties and to broaden their scope of experience by spending a summer abroad. Scholarship recipients may study in the country and hospital of their choice.

Conley is a 1969 graduate of Princeton University. He is the first Duke medical student to win the International College of Surgeons Award.

* * *

Governor Bob Scott has appointed Dr. Charles Johnson, assistant professor of medicine, to the Board of Trustees of the Elizabeth City State University. Dr. Johnson replaces Maceo Sloan of Durham, who is now a member of the Board of Governors of the University of North Carolina. His term expires June 30, 1975.

* * *

Four health science professionals and a New York business man have accepted appointments to the Medical Center's Board of Visitors.

Henry E. Rauch of Greensboro, chairman of the 17-member board, said the new members are:

Dr. John A. D. Cooper, president of the Association of American Medical Colleges (AAMC) in Washington.

Dr. Loretta C. Ford, professor of nursing at the University of Colorado.

Dr. Andrew G. Morrow, chief of the Clinic of Surgery at the National Heart Institute in Bethesda, Md.

Mrs. Anne R. Somers, associate professor of community medicine at Rutgers University and research associate in industrial relations at Princeton.

The Board of Visitors was established to provide Duke with outside ideas and guidance in the operation of on-going programs and in the development of long-range goals in education and patient care. Membership includes representatives of private business, philanthropy, and other academic disciplines in addition to medicine and nursing.

The board meets annually at Duke in the spring to hear reports from representatives of the Medical Center. It then submits an assessment and recommendations to the administration.

Dr. James F. Glenn, professor and chief of the Division of Urology at Duke, is spending five months on sabbatical leave at the Great Ormond Street Hospital for Sick Children in London. Before that he attended the German Urologic Association's meeting in Hannover and revisited the urological facilities at the University of Aachen in West Germany.

At the Great Ormond Street Hospital, Glenn is working in collaboration with Dr. David Innes Williams, a leading pediatric urologist, performing surgery and exchanging medical information. The urologic problems of children and their relief have been a primary interest of the Duke professor for many years.

* * *

Eleven new faculty members, including two full professors, have been appointed to the faculty.

Dr. William R. Harlan Jr., formerly professor of medicine and director of the Division of Family and Ambulatory Medicine at the University of Alabama, was named professor of community health sciences and professor of medicine.

Dr. Lyndon K. Jordan, formerly in private practice in Smithfield and chief of staff at Johnston Memorial Hospital, was named professor of community health sciences.

The other new faculty members are:

Dr. Enrico Clerici, appointed visiting professor of microbiology and immunology; presently associate professor at the University of Milano.

Dr. Eleanor F. Branch, appointed associate professor of physical therapy; formerly part-time lecturer in the Department of Physical Therapy.

Dr. Bruno J. Urban, appointed associate professor of anesthesiology; formerly clinical director in the Department of Anesthesia at Kings County Hospital Center in Brooklyn, N. Y.

Dr. John H. Cassedy, appointed assistant professor of otolaryngology; formerly postdoctoral trainee in the Department of Psychology and Division of Otolaryngology.

Dr. Gerald Charles, appointed assistant professor of community health sciences; formerly resident in ambulatory and community medicine and acting chief at the Health Systems Planning and Research Section of the San Francisco Veterans Administration Hospital.

Dr. Arthur Frederick David Cole, appointed assistant professor of anesthesiology and assistant professor of obstetrics and gynecology; formerly senior staff anesthetist at Wellesley Hospital in Toronto, Canada.

Dr. Curtis Drew Edwards, appointed assistant professor of medical psychology in the Department of Psychiatry and associate in pediatrics; formerly psychology intern in the Division of Child Psychiatry.

Dr. Gerald Martin Rosen, appointed assistant professor of pharmacology; formerly research associate at the Institute for Medical Research and Studies.

Dr. Eugene S. Schneller, appointed assistant pro-

North Carolina Medical Society

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40 - 49	78.00	189.00	240.50
50 - 59	114.00	260.50	312.00
60 - 64*	179.00	400.00	451.00

PLAN B—\$300 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 31.00	\$ 71.00	\$ 93.50
40 - 49	47.50	110.00	132.50
50 - 59	74.00	158.50	181.50
60 - 64*	112.50	251.00	273.50

PLAN C—\$500 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 19.50	\$ 43.00	\$ 57.00
40 - 49	32.00	74.00	88.00
50 - 59	51.50	114.00	127.50
60 - 64*	86.50	192.50	206.50
65 - 69	36.00	106.00	119.50

* Renewal rates only—When an Insured Member attains Age 65 he may continue to be insured under the \$500 Deductible Plan which is integrated with Medicare.

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Under 30	\$ 27	\$ 54	\$ 81	\$ 108	\$ 135	Under 30	\$ 11
30-34	29	58	87	116	145	30-34	12
35-39	38	76	114	152	190	35-39	15
40-44	56	112	168	224	280	40-44	22
45-49	84	168	252	336	420	45-49	34
50-54	131	262	393	524	655	50-54	52
55-59	203	406	609	812	1,015	55-59	81
60-64	306	512	918	1,224	1,530	60-64	122
65-69	242	484	726	968	1,210	65-69	97

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fessor of community health sciences and assistant professor of sociology; formerly project director at Montefiore Hospital and Medical Center.

News Notes from the—

**NORTH CAROLINA REGIONAL
MEDICAL PROGRAM**

A basic pamphlet about the North Carolina Regional Medical Program is now available. The pamphlet describes the historical development of NCRMP and includes the complete 1972 Goals and Objectives statement as well as capsule descriptions of the 15 projects currently being funded. Copies are available from: Patricia M. Jones, Coordinator, Communications Office; North Carolina Regional Medical Program; 4019 North Roxboro Road, Box 8248, Durham, N. C. 27704.

* * *

The North Carolina Regional Medical Program has contracted with the Educational Testing Service of Princeton, New Jersey to develop a series of equivalency and proficiency tests which may help alleviate the shortage of registered nurses in North Carolina. Announcement of the contract came from F. M. Simmons Patterson, M.D., executive director of NCRMP, and Dr. Jay A. Davis, director of the ETS office in Durham.

NCRMP's executive director said of the project: "Our contract with Educational Testing Service for development of this essential testing instrument for a career - ladder educational program represents a unique venture. It is one of the first collaborative efforts of a nationally respected testing service and an agency representative of statewide health care interests. We believe that the climate for utilization of these instruments in North Carolina is exceptional, and that the potential for developing a model with national transferability is great. Though the beginning effort will be in nursing, we hope to be instrumental in extending the process to other interested allied health disciplines."

A nine-member advisory committee of prominent nursing educators has been named to establish the content, specifications, and standards for the tests. Committee members are: Mrs. Mary Adams, president of the N. C. Licensed Practical Nurses Association, Inc.; Miss Audrey Booth of the North Carolina Regional Medical Program; Mrs. Patricia Conklin, associate professor of the School of Nursing at North Carolina Central University; Larry Cutchins, M.D., a Tarboro physician; Miss Miriam Daughtry, director of the Division of Health Occupations of the N. C. State Board of Education's Department of Community Colleges; Miss Louise Egan, educational consultant with the Florida Department

of Education; Mr. Bill Kastrinos of the Educational Testing Service in Princeton, N. J.; Mrs. Jessie Kiser, chairman of the Department of Nursing at Central Piedmont Community College; and Miss Mary McRee, executive director of the N. C. Board of Nursing. The test development project is directed by Graham Burkheimer, a research psychologist at ETS-Durham and an adjunct faculty member at the UNC School of Nursing, Chapel Hill.

The test development project is one of a number of projects in NCRMP's Manpower Program area, designed to "promote and assist the development, efficient utilization and optimum distribution of qualified health care personnel throughout the state, with special attention to underserved areas, both rural and urban." Other program areas of the North Carolina Regional Medical Program, a Durham-based statewide agency funded through DHEW's Health Services and Mental Health Administration, are Emergency Medical Services, Quality of Personal Health Care Services, and Personal Health Care Delivery Systems.

"North Carolina, like many other states, continues to experience a serious shortage of registered nurses in most areas," states Audrey Booth, R.N., M.S.N., coordinator of NCRMP's Health Professions Development Manpower Program. "At the same time, we have many LPNs or returning servicemen with valuable experience and training. The provision of tests that can certify competencies already held can enable institutions to be more efficient in committing staff and training resources, and can permit individuals to upgrade their skills and competencies more readily." The schedule calls for tests to be ready for initial use in September, 1973. The North Carolina Regional Medical Program's Career-Ladder Nursing Project, located at the College of the Albemarle in Elizabeth City, will serve as one of the first sites for trial use of the tests.

Dr. J. A. Davis of ETS indicated that the project will "follow in a pattern established and proven successful by the College Level Examination Program (CLEP) of the College Entrance Examination Board." In this program, persons wishing to gain college credit for past personal study or experience can certify their competency through national examinations. Some 1200 colleges and universities across the country now recognize the CLEP exams, developed by the Educational Testing Service about seven years ago.

The Educational Testing Service, which is being awarded the \$45,000 contract, is a private non-profit organization. Its office in Durham was established in 1967 to conduct evaluation studies and to develop new applications of educational measurement.

* * *

Robert B. Lindsay, M.D., coordinator of NCRMP's Quality of Care Program, was among those who attended a workshop on the Problem-

Oriented Medical Record on Sept. 11-13 at Emory University in Atlanta. Co-directors of the workshop were Lawrence Weed, M.D., who developed the Problem-Oriented Record System, and J. Willis Hurst, M.D., one of its proponents.

Over one thousand people attended the conference, demonstrating the widespread interest in this approach. All health disciplines, plus educators and other interested individuals, were represented. Approximately 23 North Carolinians, including those sent by the Veteran's Administration and the military, were present.

At the POMR conference held last year, an attempt was made to increase awareness of the record. The emphasis at this year's meeting, to be followed by a workshop next year, was the system itself.

Proponents of the system feel that it involves not only improving medical records, but that it is an avenue to better quality of medical care. Dr. Hurst clearly expressed this in referring to his article, published in the *New England Medical Journal*. Though he entitled the article "Ten Reasons Why Lawrence Weed is Right," he now believes there are at least twenty reasons.

Workshop directors repeatedly emphasized that the system includes a more organized and logical approach to the patient through utilization of a data base constructed from the patient's history, physical examinations, and laboratory tests. This leads to

definition of the problem list from which an assessment of the case is made and the plan of treatment and patient education is constituted.

In discussing his reasons for attending the workshop, Dr. Lindsay noted: "NCRMP sees the Problem-Oriented Medical Record as one of the avenues to higher quality personal care. Though not appropriate to every practice, it enhances logical analysis of clinical situations, better planning, multidisciplinary teamwork, and other desirable features."

* * *

The North Carolina MAST (Military Assistance to Safety and Traffic) program is meeting with enthusiastic response in areas of the state eligible to participate in the program. Seven orientation sessions attracted groups of 20 to 50 hospital administrators, physicians, emergency room nurses, ambulance personnel, and law enforcement personnel.

The sessions were funded by the North Carolina Regional Medical Program, with the N. C. Hospital Association cooperating in planning the sessions. The seven hospitals serving as hosts for the sessions were: Stanly County Hospital, Albemarle; Scotland County Hospital, Laurinburg; Betsy Johnson Hospital, Dunn; New Hanover Memorial Hospital, Wilmington; Lenoir Memorial Hospital, Kinston; Nash County Memorial Hospital, Rocky Mount; and Charlotte Memorial Hospital, Charlotte.

The typical orientation session opened with an

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address by William W. Lowrance, coordinator of NCRMP's Emergency Medical Services Program. Mr. Lowrance detailed the relationship between MAST and a broad Emergency Medical Services System, focusing on elements such as hospitals, communications, ambulance providers, planning by CHP agencies, and local involvement through EMS Councils.

Dr. Herbert Proctor of the UNC School of Medicine's Department of Vascular Surgery, chairman of the MAST Coordinating Committee, discussed the MAST concept and its utilization in North Carolina. He indicated that though the N. C. MAST program does not have final congressional approval, the commanding officer at Fort Bragg can give mission by mission approval.

Helicopter missions may now be requested by physicians within a 100-mile radius of Fort Bragg when time is crucial to medical treatment, when en route jousting may be dangerous to a patient, and when ground or water vehicles cannot make the necessary evacuation. The service can be utilized for interhospital transfer of stabilized patients, premature infants, donor organs, and blood. Duke, N. C. Baptist, and N. C. Memorial hospitals have agreed to receive patient transfers in the program and have designated landing sites.

Capt. Terry Muldoon of the 15th Medical Detachment at Fort Bragg also spoke at the sessions, explaining the military involvement in the MAST program. There are 14 pilots and 30 enlisted men participating in the helicopter emergency medical service. The pilots are almost all Vietnam veterans, and the medics have an average of about 400 hours of training each.

A four - man crew, composed of two pilots, one crew chief in charge of aircraft maintenance, and a medic will normally participate in an operation. The service is free to patients, participating medical facilities, and the state. Capt. Dennis Story is Military Coordinator for the MAST program.

AMERICAN COLLEGE OF PHYSICIANS

Included in a group of 179 physicians in the United States and Canada who were recently admitted to membership in the American College of Physicians were six from North Carolina. They are:

Lieutenant Commander James K. Weick, MC, United States Navy, Camp Lejeune; Dr. Claud M. Grigg, Charlotte; Dr. Charles Johnson, Durham; Dr. Gordon B. Arnold, High Point; Dr. Thomas F. Camp, Jr., Raleigh; and Dr. Dudley Anderson, Wilson.

AMERICAN COLLEGE OF SURGEONS

Twenty-five North Carolina doctors have been inducted as new Fellows (members) of the American College of Surgeons. The induction took place during

the College's annual clinical Congress held in San Francisco in October. The North Carolina initiates are:

From Asheville — Drs. Edward K. Isbey, Jr., Charles A. Keller, Jr., Joseph A. Noto, and William W. Morgan, Jr.; from Chapel Hill — Drs. Floyd A. Fried and Stanley R. Mandel; from Charlotte — Drs. R. Dale Ensor, Lynn Fort III, Stephen J. Naso, Jr., and Lester L. Smith, Jr.

Also, Drs. H. Newland Oldham, Jr., from Durham; William S. Bost, Jr. and Bernard Vick, Greenville; George M. Hancock, Lenoir; John E. Yurko, Morehead City; Charles H. Ashford, Jr., New Bern; John L. Monroe, Pinehurst; H. Gerard Hartzog III, Raleigh; John A. Crook, Jr., Reidsville; James F. Gibson, Sanford; Nagui R. El-Bayadi, Sylva; Robert K. Creighton, Jr., Wilmington; and Wayne E. Davis, Winston-Salem.

NEWS NOTES

At the time the Olympics were taking place in Munich, Germany, North Carolina doctors made a good showing among 48 contestants in a Triathlon event held in Durham. The latter event included running, swimming, and racing a horse over a mile-long course with 19 fences.

Dr. S. Dummitt, pathologist, of Sanford, Dr. M. A. Pittman, Jr., surgeon, of Wilson, and Dr. J. Lee Sedwitz, surgeon, of Zebulon won the senior event (age 35 or over), while the winning senior team, including Drs. Pittman and Sedwitz, claims to have had the best time.

"Caring for Your New Baby" Nursing Series from Wyeth

Wyeth Laboratories has recently completed a four-part series of audiovisual programs designed to help new mothers learn to care for their babies. Entitled "Caring for Your New Baby," the series includes segments on breast feeding, formula preparation and feeding tips, bathing and skin care, and general health care.

The complete program runs 52 minutes—each section averaging 13 minutes. Designed to augment personalized instruction, the program may be shown in its entirety, or in individual segments.

Wyeth will individually tailor the program to suit most of the audio and visual equipment currently available at each hospital. 35 mm color slides or a film strip can be coordinated with cassettes or records for inaudible or audible cuing.

Also included in the program are related printed instruction materials. The total cost is \$200. A Spanish version will be available in December.

For more information, contact your local Wyeth representative or write to Wyeth Laboratories, P.O. Box 8299, Philadelphia, Pa. 19101.



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Month in Washington

The American Medical Association supported a two-year extension of the federal National Health Service Corps program under which Public Health Service personnel are assigned to areas with critical health manpower shortages.

Richard E. Palmer, M.D., a member of the AMA Board of Trustees, told the House Health Subcommittee that the Association believed that the NHSC program, which got under way 18 months ago, was having "an auspicious beginning" and promised "to help alleviate the maldistribution of health personnel affecting shortage areas." He said, "its capabilities for bringing needed services into shortage areas are yet to be fully demonstrated."

"Additional experience will permit a fuller evaluation of the program's potential," Dr. Palmer said. "In supporting the NHSC, however, we believe it is essential that incentives now contained in the program are retained so that we may hopefully achieve our overall objective of meeting community needs on a long-term, continuing basis."

The AMA spokesman objected strenuously to a proposed deletion of a requirement for certification by state and district health societies that such health personnel are needed before assignment to a particular area.

... Much of the ... planning to date has been centered around community participation in the NHSC program to further encourage the Corps physicians, dentists and other professionals to feel they are part of the community life," Dr. Palmer said. "We urge this committee not to take any action now which would block communities and professionals from attaining this goal."

"Certification by the physician's or dentist's peers—the local members of his own profession—that his services are needed, together with concurrence by local government, provides the strong and necessary base of community acceptance and participation in his assignment. Removing this base could erect barriers and prevent the level of contact and rapport with peers which are significant factors in stimulating the professional man to establish professional roots in a community."

Furthermore, the record of cooperation by the medical profession at the local, state, and national levels speaks against the proposed amendment deleting the certification provision. The AMA has worked closely with the NHSC to help make the NHSC a reality.

... At the Corps' request, the AMA has also distributed to all state medical associations and county medical societies brochures on the program, together with lists of NHSC personnel in central and regional offices to be contacted, requesting assistance in identifying areas particularly short of health manpower. All of these activities, and others, have been undertaken to inform state and local medical societies of the program's interest, method of operation, and goals.

"Most recently the Association has contracted with the Corps for the AMA to recruit physicians to serve in areas of need on a short-term basis. This undertaking, which we call 'Project U.S.A.', will be a valuable adjunct to the Corps in its operational phases of its program."

"In short ... the AMA has actively provided assistance in the implementation of the NHSC. The medical profession shares ... with government, and with communities the common goal of getting needed medical services into shortage areas."

"Even more directly than our activities at the national level, we believe that the measure of success to date of this new program can be attributed to the cooperation received at the local level from the various medical communities. It should be kept in mind that the great number of assignments of physician personnel made in this program to date have been possible *because* the local and state societies have certified to the need for such health personnel. As a fact, in some instances, the medical society has been a moving party in seeking assignment of personnel under this program."

"... we believe that the foregoing is strong evidence that the active participation of organized medicine is to the advantage, and not to the detriment of the program. We must assert strongly that we are opposed to the deletion of the present certification requirements in the law. The record of cooperation warrants continuing these requirements. The absence of such requirements could defeat the goal we all share."

The AMA also recommended:

Continuation of a provision giving the Secretary of Health, Education and Welfare latitude as to the use of PHS facilities, rather than requiring their use as proposed.

Against providing additional medical training scholarship arrangements in connection with the program.

President Nixon signed into law legislation providing for expanded research programs to combat heart and lung diseases.

The National Heart and Lung Institute is authorized to increase its expenditures for such research to \$1.38 billion over the next three years.

The new law provides for a comprehensive program for research into the cause and the prevention of all forms of heart, lung, and blood diseases; research into basic biological processes; research into techniques, drugs and devices used in diagnosis and treatment; establishment of programs for field studies and large-scale testing and demonstration of preventive therapeutic and rehabilitative approaches, including emergency medical services for persons suffering from heart and lung diseases; public and professional education relating to all aspects of these diseases.

The bill also authorizes the Heart and Lung Institute to provide for the development of 15 new centers for basic and clinical research into the diseases of the heart, blood vessels, and blood, and 15 new centers for basic and clinical research into lung diseases.

The research program for these diseases is upgraded similarly to the expansion of cancer research authorized last year.

* * *

Establishment of a military medical school is authorized under a recently enacted law.

A companion program will provide up to 5,000 full federal scholarships in effect at one time for would-be physicians to go to civilian medical schools if they agree to serve in the armed services for five to seven years after graduation. The scholarships would provide the full cost of tuition and fees and \$100 a week living allotment.

The military medical school is to be called the Uniformed Services University of the Health Sciences and is to be located within 25 miles of Washington, D. C. It will be set up to have 100 graduates a year.

Authorization of the military medical school capped with success a long fight of Rep. F. Edward Hebert (D., La.), chairman of the House Armed Services Committee. This year, the House approved the school, but the Senate only approved a study of the proposal. However, Hebert succeeded in getting the House-Senate conferees to approve establishment of the school.

A report on the conference on the legislation said the Senate conferees "pointed out their concern over the apparent lack of any clear consensus in the government and the health professions as to the need and desirability of establishing such a university . . . and questioned the overall philosophy embodied in the principle of establishing a university of this type entirely supported by federal funds."

Related legislation, which was supported by the American Medical Association, would raise the pay

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of military physicians to attract them to the armed services. Ernest B. Howard, M.D., Executive Vice President of the AMA, wrote the House Armed Services Committee:

"The American Medical Association supports the principle of providing special incentives through which the Armed Forces may secure and retain qualified medical officers on active duty. This approach is entirely consistent with the concept of an all-volunteer Armed Force, which would require adequate manpower in the critical health professions. We support incentives designed to provide adequate medical manpower on a more equitable financial basis."

* * *

Sterilization became the most popular form of birth control for couples over age 30 during the last half of the 1960's, but younger couples still preferred "the pill," a government financed study shows.

The 1970 National Fertility Study, conducted under contract with the National Institutes of Health's

Center for Population Research, also provided fresh evidence that increased use of contraceptive devices was "a major factor in the drop in the nation's birth rate," which now is at an all time low.

Although nearly six million married women were using oral contraceptives in 1970, "one of the most dramatic findings," was that voluntary sterilization was preferred more often than "the pill" by both black and white couples in which the wife was aged 30-44.

"The jump in reliance on surgical procedures, and the fact that contraceptive sterilization had by 1970 become the most popular method among older couples, appears to reflect the unsuitability of other methods of contraception for many couples who have already had all the children they want to have," said the first published report from the study.

It was written by Charles F. Westoff of Princeton University, former executive director of the Commission on Population Growth and the American Future.

Book Reviews

Confessions of a Gynecologist. By Anonymous, M.D. 319 pages. Price, \$7.95. Garden City, N. Y.: Doubleday Company, 1972.

When asked to review this book, I first thought of asking for the same privilege of anonymity granted the author. On completing it, however, I wondered why the author wanted to protect his identity. His maturity, wisdom, and experience are reflected in each component of women's care he discusses.

For women readers the title is intentionally catchy, but a little deceptive if one expects a disclosure of intimate sexual encounters. The insight into the thought processes behind what the doctor tells the patient is realistic.

For the practicing obstetrician the book is a replay of typical office experiences. He may even regret not having gone ahead and written his own book when it occurred to him.

For the medical student, physician's assistant, and other paramedics in training, the book should be required reading. It may inspire a little consideration of female sensitivities and better ways of handling them.

FLEETUS L. GOBBLE, M.D.

Current Pediatric Diagnosis and Treatment. Edition 2. By C. Henry Kempe, Henry K. Silver, and Donough O'Brien. 1,008 pages. Price, \$12.00. Los Altos, Calif.: Lange Medical Publications, 1972.

The second edition of this paperback book serves the purpose of giving sufficient information to enable a physician who deals with children occasionally to find immediate answers to most of his questions regarding diagnosis and therapy.

The format is basically unchanged from the previous edition, although the material is somewhat more up to date and chapters dealing with ambulatory pediatrics and dental problems have been added. The text is not complete enough to serve as an overall text on pediatrics, and yet it is sufficient to serve the purposes of the family physician and to be used as a source of reference in emergency rooms and other places where immediate information is desired. The book is clearly written and the index is satisfactory. The cost is not prohibitive.

WESTON M. KELSEY, M.D.

Plan Ahead for
**FUTURE
MEDICAL SOCIETY
MEETINGS**

ANNUAL MEETING

The Carolina, Pinehurst, N. C.

1973-May 19-23

1974-May 18-22

LEADERSHIP CONFERENCE

The Carolina, Pinehurst, N. C.

1973-January 26-27 / 1974-January 25-26

COMMITTEE CONCLAVE

Mid Pines Club, Southern Pines, N. C.

1973-September 26-30

1974-September 25-29

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES
AND SELECTED CITIES OF RESIDENCE,
WITH RATES PER 1,000 DELIVERIES* - NORTH CAROLINA,
AUGUST 1972 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE.....								COUNTY	NONWHITE.....							
	PERINATAL DEATHS		TOTAL DELVY		PERINATAL DEATHS		TOTAL DELVY			PERINATAL DEATHS		TOTAL DELVY		PERINATAL DEATHS		TOTAL DELVY	
	AUG 1972	SEP 1971-1972	AUG 1972	SEP 1971-1972	AUG 1972	SEP 1971-1972	AUG 1972	SEP 1971-1972		AUG 1972	SEP 1971-1972	AUG 1972	SEP 1971-1972	AUG 1972	SEP 1971-1972	AUG 1972	SEP 1971-1972
NORTH CAROLINA	140	1703	64532	27.3	100	1191	26327	42.0									
ALAMANCE	5	39	1130	29.5		14	421	33.3	JOHNSTON	1	27	771	35.0		14	295	47.5
ALEXANDER	3	11	340	31.8	1	2	40	—	JONES		1	71	—		1	76	—
ALLEGHANY		6	122	49.2			7	—	LEE	1	13	413	31.5		12	171	70.2
ANSON		7	145	36.3	1	15	302	49.7	LENNIR		17	547	31.1		13	444	29.3
ASHE		14	290	47.0			6	—	LINCOLN	1	10	324	19.1		3	109	—
AVERY	1	10	218	45.9			2	—	MOOREWELL	1	18	545	33.0		1	39	—
BEAUFORT	3	14	334	36.5	3	11	253	43.5	MACON		4	223	—			10	—
BERTIE	1	3	175	—	1	10	236	42.4	MADISON		11	250	44.0				—
BLADEN	1	3	248	20.2		14	212	66.0	MARTIN	3	9	195	46.2	2	18	259	69.5
BRUNSWICK	1	4	334	—		9	155	58.1	MECKLENBURG	3	87	4083	21.3	9	82	2286	35.9
BUNCOMBE	0	60	1917	35.5	1	13	259	50.2	MITCHELL		3	132	—			1	—
BURKE	4	20	1040	25.3		6	87	—	MONTGOMERY		5	243	20.6	2	6	130	46.2
CABARRUS	1	21	945	22.2	1	13	250	44.8	MOORE		15	460	32.6		15	218	68.8
CALDWELL	5	33	1030	32.0		3	75	—	NASH	1	12	559	21.5		13	512	25.4
CAMDEN		1	54	—			41	—	NEW HANOVER	1	29	1163	24.8		15	458	32.8
CARTERET	1	9	595	17.8		1	86	—	NORTHAMPTON		4	191	—	2	16	301	53.2
CASWELL		17	166	60.2		9	166	53.6	ONSWLOW	7	65	2134	29.8	7	14	426	32.9
CATAWBA	7	55	1514	36.3	2	8	252	31.7	ORANGE	2	22	693	31.5	2	16	221	72.4
CHATHAM		11	323	34.1		3	146	—	PAMLICO		2	37	—		3	50	—
CHEROKEE	2	7	266	20.3			12	—	PASQUOTANK		5	281	17.8		4	158	—
CHOWAN		3	34	—		2	90	—	PENDER		3	163	—	1	4	156	—
CLAY	1	4	171	—			1	—	PERQUIMANS		1	55	—			51	—
CLEVELAND	2	33	932	32.2	3	25	399	62.7	PERSON		6	235	21.1		5	213	23.5
COLUMBUS		20	517	54.2	3	19	367	51.8	PITT	1	20	630	31.7	3	30	631	47.5
CRAVEN	2	20	1172	22.2	1	14	405	34.6	PULK		4	141	—			22	—
CUMBERLAND	11	95	3665	25.9	1	56	1596	35.0	RANDOLPH	2	33	1193	27.5		3	124	—
CURRITUCK	1	4	37	—			42	—	RICHMOND	2	14	455	30.8	2	12	255	47.1
DARE		3	174	—			13	—	ROBESON		12	617	13.4	4	59	1700	34.7
DAVISON	1	42	1417	29.6		11	252	43.7	ROCKINGHAM	1	25	995	25.1	1	23	382	60.2
DAVIE	1	13	259	38.6	1	4	56	—	ROWAN	2	21	1086	19.3	2	13	318	40.9
DUPLIN	1	8	365	21.9		12	303	39.6	RUTHERFORD	2	19	654	23.1		6	177	33.9
DURHAM	2	33	1202	25.7	5	36	665	41.6	SAMPSON	2	10	390	25.6		7	337	20.8
EDGEcombe		7	397	17.9	1	19	455	33.4	SCOTLAND		12	294	40.1	3	14	327	42.8
FORSYTH	4	51	2437	20.9	3	47	1122	41.9	STANLEY	2	15	593	25.1	1	7	130	53.8
FRANKLIN	1	4	173	—		11	241	45.6	STOKES	1	15	380	38.3		2	61	—
GASTON	3	47	2534	18.5	4	24	517	48.4	SURRY		23	873	23.2		4	57	—
GATES		3	48	—		8	90	—	SWAIN		3	103	—			61	—
GRAHAM	1	3	95	—			7	—	TRANSYLVANIA		7	263	20.4		1	17	—
GRANVILLE	2	11	218	50.5	1	11	269	38.1	TYRRELL		1	13	—		2	28	—
GREENE		3	34	—	1	5	127	39.4	UNION	3	22	134	23.1		21	334	62.9
GUILFORD	0	60	3281	24.4	5	60	1536	44.3	VANCE	2	12	355	33.3	2	19	361	52.6
HALIFAX	3	19	394	48.2	4	27	615	43.9	WAKE	8	73	2720	26.8		37	1073	34.5
HARNETT		16	622	24.9	3	22	316	69.6	WARREN			64	—		8	167	47.9
HAYWOOD	3	22	612	35.9			14	—	WASHINGTON	1	2	122	—	1	13	124	104.8
HENDERSON	2	21	692	30.3		2	37	—	WATAUGA	3	10	339	24.5		1	6	—
HERTFORD		3	123	—		16	265	60.4	WAYNE	1	30	1143	31.4	6	28	615	45.5
Hoke		1	115	—		9	234	36.5	WILKES	2	21	843	24.9		1	55	—
HYDE		3	43	—	1	5	52	—	WILSON		6	514	15.6	1	23	540	42.6
IREDELL	2	19	689	21.4	2	14	349	40.1	YADKIN		9	361	24.9		2	27	—
JACKSON		10	279	35.6		2	66	—	YANCEY	2	5	201	24.9			4	—

CITIES

CITY TOTALS ARE ALSO INCLUDED IN COUNTY TOTALS

ALBEMARLE	1	1	136	—		2	44	—	LENOIR	2	8	188	42.6		1	38	—
ASHEBORO		1	214	—			31	—	LEXINGTON		7	233	30.0		3	82	—
ASHEVILLE	1	18	507	31.0	1	13	226	57.5	LUMBERTON		3	141	—	1	8	198	40.4
BOYLINGTON		17	446	38.1		3	155	—	MURKOE	1	3	130	—		8	109	73.4
CHAPEL HILL		4	234	—	1	2	61	—	MURKOE	2	7	123	56.9		1	23	—
CHARLOTTE	3	59	2467	24.7	3	75	1987	37.7	NEW BERN		1	157	—	1	5	160	31.3
CINCOKO	1	0	106	36.1	1	7	112	62.5	RALEIGH	2	30	1232	24.4		26	580	44.8
DURHAM	1	19	702	24.9	4	31	772	40.2	REIDSVILLE		4	139	—		4	88	—
EDEN	1	3	113	41.5		4	58	—	RUANOKE RAPIDS	3	10	130	55.6		3	34	—
ELIZABETH CITY		2	126	—		3	81	—	ROCKY MOUNT E.		2	92	—		7	142	49.3
FAYETTEVILLE	3	20	939	27.7	1	36	599	66.1	ROCKY MOUNT N.	1	5	217	23.0		6	121	49.6
GASTONIA	22	693	31.5	3	12	261	46.0	ROCKY MOUNT C.	1	7	309	22.7		13	263	49.4	
GOLDSBORO	9	293	30.7	3	15	251	59.8	SALISBURY		4	157	—		7	146	47.9	
GREENSBORO	30	1536	18.9	2	40	953	42.0	SANFORD		4	141	—		5	79	—	
GREENVILLE		7	258	27.1	1	7	168	37.2	SHELBY		5	154	32.5	1	5	104	48.1
HENDERSON	2	0	163	49.1	1	5	134	37.3	STATESVILLE	1	3	183	—	1	6	165	36.4
HICKORY		12	373	39.6		4	127	—	THOMASVILLE		6	194	30.3		6	97	—
HIGH POINT	4	23	717	34.9	1	20	428	46.7	WILMINGTON	14	504	27.3		12	398	30.2	
JACKSONVILLE	2	18	332	47.1	1	3	79	—	WILSON		2	265	—		8	245	32.7
KINSTON		9	232	38.0		6	235	25.5	WINSTEN SALEM	1	25	1109	22.5	3	47	1059	44.4

PERINATAL DEATHS = STILLBIRTHS OF 20 WEEKS GESTATION OR MORE + NEONATAL DEATHS UNDER 28 DAYS OF AGE
TOTAL DELIVERIES = STILLBIRTHS OF 20 WEEKS GESTATION OR MORE + TOTAL LIVE BIRTHS
*PERINATAL DEATH RATE = PERINATAL DEATHS DIVIDED BY TOTAL DELIVERIES TIMES 1000
RATES ARE NOT CALCULATED FOR LESS THAN 100 DELIVERIES OR LESS THAN 5 PERINATAL DEATHS

The Official Journal of the NORTH CAROLINA MEDICAL SOCIETY December 1972, Vol. 33, No. 12

NORTH CAROLINA

Medical Journal

HEALTH SCIENCES LIBRARY

IN THIS ISSUE: Suggested Revisions of North Carolina Laws on Involuntary Hospitalization for Mental Illness, Robert L. Collins, Jr., M.D.; National Health Insurance and Services in Historical Perspective; An Exploratory Study of the Origins and Effectiveness of Nationalized Medical Systems, Harold J. Hassell; A Student's View of the AMA Proposals for Health Care Legislation, Patrick B. Mullen; Index to Volume 33.

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1973 LEADERSHIP CONFERENCE
January 26-27—Pinehurst

1973 ANNUAL SESSIONS
May 19-23—Pinehurst

1973 COMMITTEE CONCLAVE
September 26-29—Southern Pines



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PRESIDENT'S NEWSLETTER

NORTH CAROLINA MEDICAL SOCIETY

No. 7

December 1

AS THE CHRISTMAS SEASON APPROACHES FAST, I want first to take the opportunity to wish each of you a full measure of happiness during the coming season and to remind you to stop right now and accomplish all those things which have traditionally become a part of the Christmas season. This is the time of year when the birthday of Christ has led us to stop at least for a short period of time in order to forget about our own worries and to think about the happiness and welfare of others.

THE AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS, a national organization now numbering some 15,000 members, has just presented a certificate of appreciation to Dr. David Welton of Charlotte who has completed his term on the Certifying Board of the Association and was also made an honorary member of the AAMA. The North Carolina Chapter of the AAMA has just completed a very fine annual meeting in Wilmington, N. C., attended by a large number of enthusiastic members from our state.

NATIONAL HEALTH INSURANCE FOR THE UNITED STATES OF AMERICA has been hailed in many quarters as a method of providing high quality medical care to all at less cost. It is of interest to note the report from the Wall St. Journal which states that socialized medicine in Canada has succeeded in relieving individuals of financial hardships from illness, but critics charge the free system has created monumental problems. Canada's total health care costs are rising 13% annually, about 50% faster than the whole economy's growth. Even though individual health bills don't come out of the individual consumer's pocket, no health care is free. Some method of taxation has to be devised for paying these monumental bills.

DR. ALLAN C. BARNES, VICE-PRESIDENT OF THE ROCKEFELLER FOUNDATION, at a recent meeting of The Human Betterment League of North Carolina, addressed himself to the multiple problems of population expansion. Among many other interesting items which he pointed out was the fact that it now costs a drug company approximately \$20,000,000 to get a new contraceptive drug approved by the FDA, and, understandably, most companies are not moving in these directions.

WITH BARELY THREE WEEKS NOTICE, THE AMERICAN MEDICAL ASSOCIATION completely changed the subject for one of its large gatherings at the Clinical Convention in Cincinnati from the subject of HOME HEALTH CARE to the subject of professional service review organizations or PSRO. This was doubtlessly stimulated by the fact that the President has now signed the HRL bill into law. Section 1151 of the amendment justifies the necessity for PSROs by saying that they are needed "to promote the effective, efficient, and economic delivery of health services" to Medicare and Medicaid patients. The AMA has persistently fought the PSRO idea, though obviously not effectively, now that it has been written into the law.

Mr. Douglass Richards, Southeastern Regional Representative of the Social Security Administration from Atlanta will be speaking at the Officers' Conference of the North Carolina Medical Society about the many new provisions of the HRL law, and it will be incumbent upon the leadership of our Society, both at the

State and at the County level, to be familiar with these far reaching changes provided in this new legislation.

I am personally much concerned about the concept that it is possible to set up standards for medical care by any doctor, since in my opinion there are no standard patients with standard sets of diseases. It would seem that the only possible purpose of setting up such standards would be to give uneducated lay reviewers some possible means of dealing with medical problems about which they have no knowledge. The opinions I have are by no means shared by all doctors. Many of the leaders from various medical specialties throughout the nation are now endeavoring to set up these "cookbook" type lists.

THE COMMITTEE ON MEDICAL EDUCATION OF THE NORTH CAROLINA MEDICAL SOCIETY, at its recent Committee Conclave meeting at Pinehurst, responding to a request from the 1972 House of Delegates, recommended to the Executive Council that the North Carolina Medical Society sponsor a strong program of continuing education for physicians in our state but that such a program not be compulsory. The Executive Council, meeting on October 1, approved this policy on continuing education, which, though not in agreement with some states such as Oregon, is in agreement with many other states in general.

IMPROVED 1972 AMA MEMBERSHIP has been attained by two more state medical associations. THE NORTH CAROLINA MEDICAL SOCIETY and the Minnesota State Medical Association reported that their current dues-paying AMA membership exceeds that recorded at year-end 1971. Thus far, 22 state medical associations have bettered their 1971 totals.

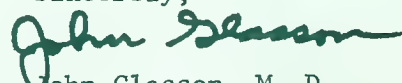
One thousand five hundred interns and residents are now members of the AMA, and a new section on interns and residents which will hold its second business meeting on November 25 prior to the Clinical Convention in Cincinnati will probably stimulate many others to become AMA members.

HELPFUL CHECKLISTS FOR THE MANY PHYSICIANS OF NORTH CAROLINA involved in examining athletes are contained in the revised edition of the AMA publication "A Guide for Medical Evaluation of Candidates for Schools Sports." The publication was prepared by AMA's Committee on the Medical Aspects of Sports. Write Dept. of Health Education, AMA Headquarters, for complimentary copies.

YIELDING TO PHYSICIAN PROTESTS, the Social Security Administration has deleted a provision requiring that the mark of illiterate or physically handicapped Medicare beneficiaries be witnessed by an individual not associated with the physician of record or other provider. The provision had been applicable only in assignment cases. The directive brought protests from physicians and medical societies when it became effective last March.

IN A LETTER TO JAMES COWAN, M.D., CHAIRMAN OF THE HEALTH INSURANCE BENEFITS ADVISORY COUNCIL, the AMA is again pushing for abolition of requirements for certification and re-certification for Medicare beneficiaries in hospitals. HIBAC is reviewing the effectiveness of these requirements in response to the AMA statement that "the provision for certification has served no useful purpose and has been the source of needless annoyance to physicians, hospitals and fiscal intermediaries. In addition, initial certification has contributed substantially to the flood of paperwork and attendant costs generated by Medicare."

Sincerely,


John Glasson, M. D.

Suggested Revisions of North Carolina's Laws on Involuntary Hospitalization For Mental Illness

Robert L. Rollins, Jr., M.D.*

Increasing concern over the civil rights of mental patients and their rights to treatment and due process of law have led to the questioning of commitment law by attorneys, mental health professionals, mental health associations, and patients. The medical appraisal of the commitment process and involuntary hospitalization has been aptly defined by Davidson.¹ In sharp contrast, Szasz² has strongly supported the civil rights of mental patients in his legal appraisal. By combining these two views, culling and mixing them with my own knowledge of and experience with the commitment process in North Carolina, I have developed some suggestions for change in the North Carolina laws and present them to you.

TWO OPINIONS ON THE COMMITMENT PROCESS

Davidson's appraisal is based on his belief that there should be maximum reliance on medical judgment. In other words, he feels the major emphasis in the admission procedure should be on the conclusions of qualified physicians who have examined the patient. Thus viewed, he feels the elements a good commitment law should provide are "(a) maximum opportunity for prompt medical care; (b) protection against wrongful confinement and deprivation of rights."¹

The case against involuntary hospitalization is strongly supported by Szasz insofar as involuntary commitment deprives the alleged mental patient of his constitutional rights. The security of his person, house, papers, and effects is threatened by unreasonable searches and seizures. He is denied the right to a speedy and public trial by an impartial

jury, the right to be informed of the nature and cause of the accusation, and the right to be confronted with the witnesses against him. He is denied his right to have compulsory process for obtaining witnesses in his own favor and to have the assistance of counsel for his defense. Furthermore, he is denied protection from excessive bail and cruel and unusual punishment and from deprivation of life, liberty, or prosperity, without due process of law.²

From a look at commitment laws it becomes apparent that involuntary treatment of mental patients is based on two assumptions: (1) that mental patients are incompetent to make a rational choice between liberty or treatment; but (2) that if they were competent, they would choose treatment. Physically ill patients cannot be committed, even for their own good. Therefore, what justifies commitment of the mentally ill? Furthermore, the term "mental illness," having no fixed boundaries, is definable according to the life styles and value judgments of the interpreters. Human liberty should not depend on such bias. The diagnosis "mentally ill" (and nondangerous) does not alone justify commitment.³

Davidson feels that allowing a mentally ill person his civil rights and giving him his day in court may subject him to feelings of anguish, humiliation, suspicion, anxiety, self-depreciation, and alienation from family.

We cannot have it both ways. Either the compulsory hospitalization of the patient is a medical problem to be disposed of without the flavor of courts, without sheriffs, due process, subpoenas, judges, juries, and charges. Or it is a legal problem, in which case the patient is entitled to due process down to the last iota—to his day in court, where he is confronted with all who would say he is sick.¹ (p 282)

When should patients be committed involuntarily? The legal grounds for hospitalization on grounds of

* Superintendent, Dorothea Dix Hospital, Raleigh, N. C. 27611.

Table 1
Admissions to North Carolina State Mental Hospitals
in 1971

	Percent
Voluntary	29
Criminal	4
Emergency	21
Medical certificate	7
Legal commitment	39

danger to self or others or of grave disability are sufficiently general and vague to encompass most forms of social deviance. If the medico-psychiatric model rather than the legal model controls the flow of patients to and from the hospital, the physician becomes therapist, judge, jury, and jailer. Many people are committed because they are disturbing others rather than because they are disturbed. "Commitment because of alleged danger to self or others should require proof beyond a reasonable doubt, based on a recent overt act or threat, that the person would, if at liberty, inflict substantial physical injury upon himself or others within the immediate future."³ (p 110)

Types of admissions to the four North Carolina State Mental Hospitals during 1971 are listed in Table 1. Thus, about 71 percent of all admissions were involuntary. On the other hand, about 88 percent of the actual resident inpatient population represented involuntary admissions (Table 2). On the basis of these figures, 88 percent of the population of North Carolina's four mental hospitals were involuntarily confined (although many would probably not choose to leave even if their legal status were different).

SUGGESTED REVISIONS

At this point, I suggest some revisions in the commitment laws of North Carolina.

1. Specific indications and time periods for involuntary hospitalizations should be given. The California Mental Health Services Act details what I consider the most progressive admissions laws, and I suggest using them as a model. Under this act a person cannot be held against his will—that is, involuntarily—unless he is dangerous to himself or others. And it is the court, after hearing testimony from at least two psychiatrists and others, including the patient, which decides whether the patient is dangerous

Table 2
Inpatient Population

	Percent
Voluntary	12
Criminal	6
Emergency	6
Medical certificate	6
Legal commitment	69

Data from Type of Commitment for Admissions, etc.⁴

to himself or others. The basic time limits for involuntary detention in California are:

a. Seventy-two hour detention—for evaluation and treatment. This may be initiated by a peace officer or authorized mental health professional, upon reasonable cause or upon court order.

b. An additional 14-day detention period of intensive treatment based on recommendations of the facility.

c. An additional 90-day detention for intensive treatment. This requires a court hearing and court order. At the end of each 90 days, re-certification (including court approval) is necessary before a patient can continue to be held involuntarily.⁵

2. A patient should be allowed to protest his involuntary hospitalization if he wishes, having maximum opportunity for as much involvement as he desires. At any point in the court proceedings the patient should be allowed to be present if he wishes, and, if he desires, should be afforded trial by jury. These decisions should not be made solely by psychiatrists. I believe confrontation by judicial decisions and judgments by peers to be forms of reality therapy. The effort and time of this process is justified by the gravity of the decision to deprive a person of liberty. Also, the patient's commitment should be reviewed periodically by the court at least yearly, and the patient should be notified that he can contest his involuntary hospitalization. The patient should be furnished legal assistance in this process.

3. Patients' rights should be spelled out by law. Patients in state mental hospitals are deprived of rights not by law, but because they are unaware of their rights or are unable to assert them. As we now inform the accused criminals of certain civil rights, we should inform the alleged mental patients of their rights. The California Mental Health Services Act spells out these patient's rights:

- (A) to wear his own clothes; to keep and use his own personal possessions including his toilet articles; and to keep and be allowed to spend a reasonable sum of his own money for certain expenses and small purchases
- (B) to have access to individual storage space for his private use
- (C) to see visitors each day
- (D) to have reasonable access to telephones, both to make and receive confidential calls
- (E) to have ready access to letter writing materials, including stamps, and to mail and receive unopened correspondence
- (F) to refuse shock treatment
- (G) to refuse lobotomy⁵

The North Carolina Division of Mental Health has a more extensive patient's rights policy which is intended to be carried out as resources permit, but this is a policy and not a law.

4. There should be an active legal aid system. Patients in the Division of Mental Health may obtain legal counsel by hiring a private attorney, by asking the presiding superior judge to appoint an attorney to represent him, or by appealing to the local legal aid society. As most of our patients are

Table 3
Ratio of Personnel to Patients

Personnel	Per 100 Patients
Physicians	5
Psychologists	2
Social workers	2
Registered nurses	20
Other mental health personnel ⁵ (p. 323)	25
Total (not including ancillary personnel such as housekeeping and dietary)	54

indigent, they are not aware of their rights and the appropriate procedures. In addition, appointment of counsel for indigent patients is discretionary with the judge. This current system needs to be more active. To enable patients to exercise their rights, the state should provide legal counsel independent of the Division of Mental Health. New York State has a Mental Health Information Service which provides attorneys who are full-time employees of the Supreme Court to render free legal services to psychiatric patients. In 1969 the release rate was 49 percent at commitment hearings when the patient had requested representation by the Mental Health Information Service.⁶

5. All patients should be allowed their right to treatment. If one is to be deprived of his freedom because he is judged to be ill and in need of treatment, then treatment should be forthcoming. A recent decision by Judge Frank Johnson of the Federal District Court in a suit against the Alabama Department of Mental Health indicated that adequate treatment required one staff member for each patient. Dorothea Dix Hospital has roughly one staff member per 1.4 patients and a per diem cost of \$17.00. California law spells out the professional to resident patient ratio as shown in Table 3.

It is difficult to define adequate treatment either in terms of numbers of personnel or cost per day. I believe a better approach to be simply letting the patient decide whether the available treatment suits him. If he is a voluntary patient, he may freely accept or reject the treatment. If he is hospitalized involuntarily, he should be assisted in contesting the need for his hospitalization. We can only presume that the citizens and legislature will provide services to the extent possible in terms of social and financial realities. Personally, I would favor the state's authorizing the Department of Mental Health to provide one psychiatric bed per 1,000 population. This bed might be located in a community mental health center, general hospital, or state mental hospital. Our 41 mental health program areas in North Carolina vary roughly from 54,000 to 355,000 population. Using this formula, area X with a population of 75,000 would have 75 psychiatric beds, with perhaps some located in the comprehensive community mental health center and some in the state mental hospital. Community programs would have to be de-

veloped using outpatient, day hospitals, night hospitals, emergency services, and other techniques to care for psychiatric patients who would not go to a 24-hour day residential facility. Alternatives to hospitalization are needed. The new area program legislation from the 1971 General Assembly allows commitment to an area program as opposed to a facility. We need to proceed with establishment of area boards and directors so that even involuntary treatment can be afforded in ways other than inpatient programs.

6. There is need for a conservatorship program. The conservatorship process provides another individual appointed by the court to act on the person's behalf and to protect his interest when he is unable to care for himself, as when gravely disabled. The conservator may determine what arrangements are necessary to provide the conservatee with food, clothing, shelter, and further treatment, and he may take any appropriate steps necessary to safeguard the person's property. The conservator is an advocate for the patient. Every conservatee should have the right to a jury trial to determine whether he is gravely disabled.⁵

7. Voluntary hospitalization should be utilized and encouraged whenever possible. The present system makes it too easy to start the process leading to hospitalization and thus to ignore the individual.

SUMMARY

Opposing views of the commitment process suggest that there should be either maximum reliance on medical judgment or particular attention given to patient rights so that the alleged mental patient will not have fewer rights than the alleged criminal. Issues in involuntary hospitalization have been discussed, and I conclude that a person should not be committed involuntarily unless he is in fact dangerous to himself or others or is unable to care for himself. The following specific changes are suggested:

1. Shorten the observation periods in the commitment process. North Carolina law (122-60-65) provides for emergency commitments (G. S. 122-59) so that an individual may be hospitalized for 20 days upon affidavit by a physician that the person is dangerous to himself or others. Judicial commitments (G. S. 122-60-65) provide for a 180-day period of observation upon petition, examination of two physicians, and an order by the clerk of court. Indefinite commitments (G. S. 122-63) can be ordered after the initial 180 days' observation upon recommendation by two physicians and an order of the clerk of court. I believe the California system previously described to be more realistic with limitations of 72 hours, 14 days, and 90 days.

2. Enact into law the present patients' rights policy (see appendix) of the North Carolina Department of Mental Health.

3. Establish a legal aid system which provides an attorney to represent the patient at commitment hearings beyond the initial 72-hour and 14-day observation periods, and prior to that time if requested by the patient. Attorneys provided by this system should be part of the judicial system rather than the mental health system.

4. Establish a conservatorship program so as to provide an advocate for the patient who is unable to care for himself.

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APPENDIX

Policy on Patient's Rights

It is the policy of the State Board of Mental Health that every person receiving the services of the Department of Mental Health be accorded, insofar as is within the reasonable capability of the Department and is consistent with therapeutic treatment, such care, treatment, and privileges as enhance one's dignity, promote his welfare, and protect his rights as a free man.

I. As a means of implementing this policy, the Department of Mental Health is hereby authorized to assure that all persons receiving services, subject to such limitations as may be reasonably necessary and which are entered in his treatment record, shall be allowed to:

1. wear his own clothes;
2. keep and use his own personal possessions, including toilet articles;
3. have access to individual storage space for his personal articles;
4. keep and to spend a reasonable sum of his own money;
5. receive remuneration for work done of value to facility;
6. receive visitors on any day;
7. have reasonable access to telephone, both to make and receive confidential calls;
8. mail and receive unopened correspondence and access to a reasonable amount of letter writing material and postage;
9. to consult legal counsel.

II. The Department of Mental Health is hereby authorized to formulate procedures which assure:

1. A written therapeutic plan of treatment for each inpatient;
2. A record made of all such treatment and of a periodic review of the patient's treatment;
3. A comprehensive review of the patient's physical and mental condition at least annually and a finding stated in his record as to whether or not he should be retained in the facility or discharged, and any recommendations for other appropriate treatment or dispositions;
4. That physical restraint, including individual confinement, of a patient is to be utilized only to prevent danger of abuse or injury to himself or others, or as a measure of therapeutic treatment, and all instances of such physical restraint or individual confinement shall be recorded in the patient's treatment record;
5. That a patient may refuse electroshock therapy unless determined by a medical doctor, to be incompe-

tent to make that decision and such finding be recorded in his treatment record;

6. That no unauthorized publication or use of a patient's treatment records shall be permitted. A patient's treatment records are deemed confidential and may be disclosed only on the following conditions and circumstances or as otherwise provided by law:
 - (a) as necessary between professional persons and/or agencies in the provision of services to the patient; or
 - (b) to those whom the patient or his legal representative designate; or
 - (c) to the extent necessary to make claims on behalf of a patient for legal or financial aid, insurance, or medical assistance to which he may be entitled; or
 - (d) to those engaged in research, pursuant to rules of the facility or the Department, provided that researchers maintain now identification and confidentiality; or
 - (e) upon the order of a court of competent jurisdiction; or
 - (f) to the extent necessary to explain to a patient or his legal representative the reasons for and nature of a denial or limitation of his rights.
7. That upon discharge a patient receives, if needed, suitable clothing for and means of transportation to his residence;
8. A patient shall not be arbitrarily transferred;
9. All patients shall upon request be informed of their rights under the mental health laws of the state and the related policies and procedures of the Department and the facility. Printed copies thereof shall be furnished and/or posted in appropriate places;
10. That all employees of the Department are effectively informed of the rights of patients, and the Department's policies and procedures for the care, treatment, and promotion of patient welfare;
11. When any right of a patient or any policy or procedure of the Department is limited or denied, the nature, extent, and reason for such limitation or denial shall be entered in the patient's records. Any continuing denial or limitation shall be reviewed every thirty (30) days and shall be recorded in his treatment record;
12. At such time as a person is initially admitted as an inpatient, unless he specifically objects, he shall inform the facility of the name and address of not more than two adults or corporate entities that he desires be advised of his admission, his rights, and the policies and procedures of the Department. The name and address of such persons shall be recorded in the patient's record, and the person notified. The facility shall make diligent effort to secure the name and address of the patient's legal representative, spouse, child, parent, a relative, attorney, or friend. If the facility is unable to locate one of the above, that fact shall be entered in the patient's record and the Commissioner of Mental Health shall be notified. A patient may designate other persons upon a subsequent admission;
13. A patient, or a person designated in 12 above, who believes his rights have been or are being violated, may give written notice to the facility which in turn shall promptly investigate the same and make written reply of its findings and disposition. A copy of both the notice and the reply shall be included in the patient's record. If the patient, or designated person disagrees with the findings and/or disposition, he may make written request to the Commissioner of Mental Health for review. The Commissioner may cause such additional investigation as he deems necessary and shall make written reply with copy to the facility for inclusion in the patient's record. The Commissioner may make such recommendations of direct such actions as he deems appropriate. The Commissioner from time to time shall make report to the State Board of Mental Health of complaint received and dispositions made.

The Commissioner may designate one or more persons to receive such requests for review, to make investigations, and reply on his behalf.

National Health Insurance and Services In Historical Perspective

An Exploratory Study of the Origins and Effectiveness of Nationalized Medical Systems

Howard J. Hassell

INTRODUCTION

Judging from current statements in the media, the American medical system is sick. While many problems regarding the medical system have been mentioned, those related to (1) the inequitable distribution of medical resources, (2) uneven delivery of health care, (3) insufficient medical manpower, and (4) soaring costs seem to be most frequently identified as *severe* problems. Even a cursory review of the literature reveals that these same problems have plagued medical practice for many years both here in the United States and in many other areas of the world. Through the years numerous proposals and plans have been developed in an effort to eliminate these problems. Nevertheless, no totally satisfactory solution has been found.

The general malaise which has beset the American economy during the past few years has exacerbated problems related to the health services industry. The imposition of unprecedented peacetime economic controls has stimulated controversy concerning "free" versus "planned" economies, and has raised the specter of "creeping socialism" in the minds of many.

Gunnar Myrdal,¹ a prominent Swedish economist, feels that American adherence to "free" economy ideas in the face of overwhelming evidence that the U.S. economy is becoming increasingly "regulated" and "controlled" is slightly irrational. He states that in the future, "Whether or not to nationalize a particular industry will stand out less and less as a ques-

tion of political principle and will be more and more a matter of practical expediency."^{1, p66} While some would agree with Myrdal that "... ideals of liberty, equality, and brotherhood can be attained only by a political development towards a Welfare World . . .," others are beginning to question the advantages of public ownership and public management.^{1, p14} On the basis of several economic studies of the British National Health Service, Cooper and Culyer² conclude that,

... it is only a full twenty years after the inception of the Health Service that the operation of state monopolies has begun to be subjected to the same analytical rigour as has long been applied to the operation of private monopolies and yet there are still many who, observing substantial defects in the way one set of institutions operates, advocate the establishment of another set without parallel analysis of how they in turn can be expected to operate.^{2, p3}

In an effort to resolve some of the medical problems confronting Americans, legislators have, during the past few years, introduced and passed major medical bills such as the Health Insurance for the Aged Act of 1965. Currently a number of bills are either in committee or before Congress. The issues surrounding the adoption of some form of national health insurance are extremely important, not only to those engaged in the health services industry but also to every American citizen. The problems that the various national health insurance proposals purport to solve are critical. The basic question to be asked is, what evidence is there that a particular program will actually eliminate these problems?

It would be unfortunate to adopt some form of health legislation without fully understanding the alternatives. An oversight of this type apparently oc-

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curred at the time the British formed their National Health Service. Cooper and Culyer report:

... no really eloquent and influential statement in favour of a radically different kind of Health Service emerged until some time after the National Health Service's inception in 1948. Indeed it could well be argued that there was no really adequate debate of the alternative goals and philosophies until after the system was well-established.^{2, p3}

Focusing on issues related to national health insurance, this article will attempt to provide some insights regarding its historical evolution in the United States and Great Britain. Special attention will be paid to Great Britain's experience with nationalized health programs which have attempted to correct the four major medical problems previously identified. Finally, conclusions will be drawn from the evidence presented.

THE ORIGIN OF NATIONAL HEALTH INSURANCE AND SERVICES

The history of national health insurance both in this country and abroad has been fraught with controversy, and in most cases it has evolved in piecemeal fashion. It might surprise some to know that in one form or another the U.S. Congress has been debating national health insurance since 1939. According to William A. Glaser, project director of Columbia University's Bureau of Applied Social Research, "Most developed countries, particularly in Europe, have some type of national health insurance."^{3, p91} While most countries do have national health insurance, this should not be confused with national health services. National health insurance "... is simply a method of paying the doctor for care given subscribers, and the conditions of private office practice or of hospital in-patient care are changed very little." On the other hand, a national health service, "... is a nationwide administrative structure that dispenses medical care and that may be used as a matter of right by all citizens, regardless of their status as workers or taxpayers."^{3, pp91, 92} As Glaser explains, national health services are rare in developed countries, Great Britain being one of the few exceptions. Because that country's experience with both national health insurance and national health services has been extensive, its programs will be examined in some depth.

NATIONAL HEALTH INSURANCE AND SERVICES IN BRITAIN

The origins of both national health insurance and the National Health Service in Great Britain can be traced to nineteenth century Poor Law. The 1860s saw the beginning of the great era of reform in British medical services. Ruth Hodgkinson, the historian of the British National Health Services, said, "... the most prescient of all reforms [was] the granting of gratuitous medical treatment to the whole of the poor."^{4, p696}

By the beginning of the twentieth century the inadequacies of the Poor Law were causing concern, so in 1911 Lloyd George introduced a compulsory self-help measure which was formalized in 1913 as the National Health Insurance Scheme. This plan attempted to relieve poverty by eliminating a number of its sources such as the financial burden of medical treatment and the loss of income due to absence from work.

The Scheme was financed on an insurance basis, with weekly contributions by the employee, his employer, and an Exchequer subsidy from the State. It was administered by local insurance committees with the help of more than 2,000 "approved societies." Regional differences in medical coverage rapidly developed under the Scheme, according to Cooper and Culyer. The flat-rate benefit system was financed by a flat-rate contribution. The colder, more mountainous, less fertile northern regions were, "... faced with high sickness rates associated with mass unemployment, bad housing and poor nutritional standards," while, "... the relatively fully-employed Southerners were enjoying the enhanced value of the pound."^{2, p2}

There were other problems besides regional differences in benefits. The 2,000 societies involved in administering the Scheme were vulnerable to duplication and inevitable waste. There was also "... a severe maldistribution of medical talent and know-how. A major effect of the power of the purse was that few doctors were attracted to areas which were unpleasant to live in and which offered little or no private practice."^{2, p2} Related to the uneven distribution of medical talent was the uncoordinated hospital system. There was a virtual monopoly of talent and modern equipment "... by the best of the Voluntary Hospitals while the Municipal Hospitals appeared to the harsh critic as an unfortunate legacy of the Poor Law system."^{2, p3}

The pressure for cooperation and rationalization engendered by the outbreak of World War II precipitated the collapse of the old order. Glaser thinks that Britain's National Health Service was conceived because their National Health Insurance Scheme was incomplete and could not be adequately financed by payroll taxes. Furthermore, "... there was a desire to expand coverage of the population; more money was required to pay for hospitalization and physicians' fees than was available in the insurance funds; and the hospitals needed to be reorganized and improved."^{3, p92} Thus, the British National Health Act which became effective on July 5, 1948, was an attempt to solve these problems.

The original goals of the National Health Service have been determined primarily on, "... a series of *post hoc* rationalization ...," and only in the case of health did "... the post-war wave of socialism depart from the cherished liberal ideal of insurance. Here the link between contribution and benefit

everywhere else clung to (however tenuously) was abandoned. Coverage was to be universal and to be dependent on nothing other than being alive and on British soil."^{2, p3}

The fact that the National Health Service represented the tenth largest financial undertaking in the world indicates the enormity of the task faced by its administrators. With its initiation in 1948, Great Britain was divided into approximately 14 areas, each of which was controlled by a regional board. These boards were concerned mainly with the conduct of hospitals. Financial control rested with the Minister of Health, who delegated the responsibility for planning hospital services to the regional boards. In addition each hospital was controlled by a local committee and a management committee (Fishbein³). Teaching hospitals were left outside the jurisdiction of the regional boards and retained their own board of governors.^{2, p4}

The Minister of Health was assisted in supervising the Service by an advisory council of 41 appointed persons representing various professional medical and public health organizations. The Service was financed through taxation with one sixth being taken from the National Insurance Fund, which was also a payroll tax.^{5, p642}

Although it was felt that decisions "... as to how much of the nation's resources should be allocated to health could not appropriately be left to the individual," patients and doctors were given some autonomy in that patients were allowed to see any general practitioner who would accept him.^{2, p4} While the number of patients a general practitioner could see was limited to 4,000, he was allowed to take as many private patients as he wished. Rather than accept a basic salary system, British doctors decided to use a system of capitation fees. Fishbein reported that a G.P. with 2,000 patients would receive approximately £1,090 (about \$5,000) per year, while a G.P. with 4,000 patients could earn as much as \$9,000 a year. Specialists were paid according to a different schedule, with fees varying from \$6,000 to \$20,000 a year. However, any specialist who received more than \$10,000 per year did so only upon the recommendation of a Special Awards Committee and, according to Fishbein, only five specialists in Great Britain had attained an income of \$20,000 by March of 1949.⁵

In view of the demands placed on the British medical profession as the result of the National Health Service, one might ask what their reaction to its implementation was. That there was relatively little opposition to the formation of the National Health Service and that unusual pressures related to World War II made the necessity for reorganizing the medical system urgent have already been mentioned. It is interesting to note, however, that the British Medical Association was far from unanimous in its support of nationalizing the health ser-

vices. In fact, a plebiscite conducted by the Association prior to February of 1948 showed that "86 per cent of British physicians voted against working for the universal free medical service," and "89.5 per cent of British physicians disapproved of the National Health Service Act in its present form." According to the *Journal of the American Medical Association* (hereinafter to be abbreviated as *JAMA*), the physicians disapproved because they saw the National Health Service Act as "... the first and irrevocable step toward a whole time state medical service."⁶ Nevertheless, in May of 1948, the British Medical Association agreed that the profession would cooperate "... on the understanding that ... the Minister will continue negotiations on outstanding matters including terms and conditions of service for consultants and specialists, general practitioners, public health officers and others."^{7, p1132}

The British physicians were also told by Dr. Guy Dain, chairman of the Council and chief negotiator for the British Medical Association, that their "... freedom of choice, freedom to do state and private practice, freedom of speech, clinical freedom, freedom to regulate the list of patients and freedom to practice where the physician wished to practice, provided he did not select an overdoctored area," would be guaranteed by the Ministry of Health.^{5, p640} Some did not feel the guarantee was honored. Less than six months after the inception of the National Health Service, Lord Horder organized the Fellowship for Freedom in Medicine because he felt that "... only one of Dr. Dain's freedoms for the doctor guaranteed by the government has not yet been interfered with, and that is the right to speak and write about medicine or the service without hindrance."^{5, p645} Morris Fishbein,⁵ who was at that time editor of the *JAMA*, felt that American physicians should view the British experience as a warning that promises and guarantees of the type received by the British Medical Association were without validity. He also felt that the British Medical Association had been induced to accept the National Health Service before a firm agreement had been reached because the specialist groups broke the deadlock which had existed and wrote independent letters to the Minister of Health explaining their grievances. Subsequently it was difficult for the British Medical Association to claim to represent the medical profession as a whole.⁵

Given its gargantuan scope and the nature of the problems it was designed to solve, one must not be overcritical when reviewing its record over the past 24 years. In evaluating their own program, however, the British have not been entirely complimentary. An investigation in 1956 by Mr. Abel-Smith and Professor Titmuss indicated that the Service was working satisfactorily, but the *Spectator* felt it had not answered the question of "... whether it is the type of service that the country now needs ..." or

whether "... the money and effort now expended could be better applied in a different direction."⁸

An article in the *New Statesman* in July of 1958 reported on the progress of the National Health Service at the conclusion of its first ten years. The article identified four ways in which the Service had been run on a "penny-wise, pound-foolish" basis. The examples it gave were "... vast opportunities for saving running costs by capital expenditures . . ."; "... the Treasury . . . refused to pay the market price for entrepreneurial ability"; "... some 700 million of public money is spent with hardly any operational research to see if it is wisely used"; "... there is no money available to apply on a wide scale the cost-reducing lessons which have been learnt."⁹ In 1963 the Annis Gillie Commission published a report recommending (among other things) that the size of the doctors' lists, which were 3,500 maximum with an average of 2,300 at that time, be reduced. It also stated strongly its belief that "... group practice may be the solution of many of the current difficulties."^{10, p445}

With the aid of the computer and other advanced techniques, the evaluations of the Service have become increasingly sophisticated. Using econometric methods such as cost-benefit analysis, Martin S. Feldstein, currently an economics professor at Harvard, completed a study entitled an *Economic Analysis for Health Service Efficiency* in 1968.¹¹ In the absence of a market mechanism to signal preferences and opportunity costs to decision makers, Feldstein proposed that the doctors who make most major decisions be provided with continuous information regarding factors that improve the efficiency and effectiveness of their service.

Cooper and Culyer collaborated on a study published as an "Economic Survey of the Nature and Intent of the British National Health Service" in *Social Science and Medicine* in 1971.² They made a number of points which could be considered a summary of the present status of the National Health Service. They report that *it has not been shown conclusively that State provision of health care is significantly more efficient or rational than the pre-war dual public-private system*. To determine whether the supply of medical manpower is adequate, one must first know specifically what task one wishes to perform. Although there are now, in absolute terms, twice as many doctors as there were 40 years ago, major manpower difficulties have been encountered due to the rapid transformation of the nature of medicine. "The solution to acquiring large numbers of hospital doctors has been the appointment of doctors from overseas."^{12, p7}

A much vaunted aim of both the National Health Insurance Scheme and the National Health Service was to correct the maldistribution of medical resources. To ascertain the extent of inequalities in both expenditure and manpower Cooper and Culyer

compiled 31 indices from official sources in areas covered by the 15 regional hospital boards. They concluded that "In the period since 1962 we have not been able to find much evidence that regional inequalities have been decreasing. Thus, despite a growing number of consultants the increases in manpower do not appear to have been used systematically to erase regional inequality or to achieve territorial justice."^{12, p9}

NATIONAL HEALTH INSURANCE IN THE UNITED STATES

About a decade before Great Britain began to think in terms of nationalizing their health services, Americans began to consider the possibility of providing some form of national health insurance. In the early 1930s the concept of insuring against actual medical costs even on a private basis was still quite new. Prior to that time health insurance consisted mainly of "... protection against loss of income as a result of accident or sickness, with benefits for the costs of medical care gradually added as a secondary benefit."^{12, p105} Thus, while the public and private insurance movements in the United States were conceived at approximately the same time, the history of their expansion shows much difference in their rates of progress.

As an outgrowth of a National Health Conference called by Franklin D. Roosevelt in 1938, the first national health insurance bill was introduced in Congress in 1938 by Senator Robert F. Wagner.¹³ Almost every successive Congress since then has considered some form of health legislation. With the formation of the World Health Organization in 1947, health as a "fundamental right of every human being" was formalized at the international level.¹⁴ It is interesting to note that the United States was *not* among the first to ratify the charter of WHO, and this proved to be somewhat embarrassing to American leaders in the field of health.¹⁵

Pressure for some form of national health coverage reached a crescendo in the early months of 1948, with President Harry S. Truman leading the list of advocates. Truman also proposed that an executive department be created to administer the government's programs in health, education, and security. On Jan. 7, 1948, he stated in an address to Congress:

The greatest gap in our social security structure is the lack of adequate provision for the nation's health. . . . this condition demands a national health program. The heart of the program must be a national system of payment for medical care based on well tried insurance principles.^{16, p33}

To say that the American Medical Association disagreed with the President's position would be an understatement. The only thing which drew an even slightly complimentary comment in the *JAMA* editorial reviewing the address was the statement noting the fortunate omission of the "odious" word "com-

pulsory" in the President's remarks.¹⁷ An editorial in the *JAMA* of December, 1948 had the ring of a battle cry. It announced the decision of the House of Delegates to assess every member of the Association \$25 to "... provide a fund adequate for meeting the proposal of the present administration . . . to nationalize the services of the medical profession through the enactment of a compulsory sickness act . . ."^{18, p1089} When the Brookings Institution's report on compulsory health insurance was released, a *JAMA* editorial hailed its publication and predicted that it would "... bring a blush of shame to the cheeks of even these hardened advocates of government medicine."^{19, p539}

Numerous references to health insurance issues were made in *JAMA* editorials throughout 1949. The editorials were generally defensive in tone. Some attempted to discredit opposition groups, while others^{20, 21} emphasized the Association's "... determined opposition to compulsory sickness insurance."²¹

To counteract the President's proposal the AMA drew up its own ten-point national health program.²¹ The program specified ten areas of concern: nutrition, preventive medicine, pre-natal care and childbirth, child care, hospitals, voluntary prepayment insurance plans, veterans' health needs, research, philanthropic services, and health education.²² Although the AMA program was commendably comprehensive in scope, there appeared to be a *tendency to regard what later became the major health issues as secondary or minor problems*. For example, submerged in the last few paragraphs under point six are a few comments related to the supply of physicians and the implications of group medical practice. Two sentences were devoted to the progress being made with programs providing incentives to those interested in practicing in rural areas. Apparently the AMA felt that voluntary health insurance would act as a general panacea for all problems related to rising health costs, since increasing costs were not identified as a specific concern under any of the ten points. Even though the report defined a group which could "... care for themselves under ordinary circumstances, but who find it difficult to meet the cost of any illness . . ." they endorsed spending government money for such individuals only in principle.^{22, p266}

The AMA's insensitivity to the importance of these issues has possibly contributed to the increasing public interest in national health insurance. Glaser has pointed out, "Demands for national health insurance or for a national health service, arise in any country when medical care is unavailable or too expensive for large segments of the population."^{23, p93}

What were the legislative objects of the AMA's "determined opposition"? Actually there were three main health insurance bills before Congress in June

of 1949. In some respects the bills resemble present proposals.

Senator Robert A. Taft and two Republican colleagues sponsored one of the 1949 bills; it proposed making federal grants to the states. The states in turn would use the money to pay for medical services for those who could not afford "all or part" of the costs of their care. Alabama's Senator Lister Hill, together with two Democrats and two Republicans, sponsored another state-aid bill which would be administered through voluntary health insurance plans. This bill covered only diagnostic work done in a hospital or clinic and hospitalized illnesses.

It was the third bill sponsored by Senator Jacob K. Javits, Christian A. Herter, and others that generated much of the AMA's impassioned rhetoric. The Javits bill provided for the establishment of federal, state and local bodies composed of representatives from the medical professions, hospitals, and the consumers of medical services. It was to work through voluntary insurance plans, but it would require all approved plans to charge their members a percentage of earnings instead of the flat rate which most of the plans charged at that time. An estimated \$5.5 billion a year was considered necessary to operate the plan. Although this would not completely cover every individual's total medical bills, Michael M. Davis, chairman of the Committee on Research in Medical Economics, felt that this proposal went to the heart of the immediate and long-range problems which he perceived to be:

- (1) making modern medical care financially available on a democratic basis;
- (2) providing professional and economic incentives for the increase of high grade personnel and facilities and their distribution according to need; and
- (3) placing the people who receive and pay for service in sound relations with the professions and institutions that serve them."^{23, p15}

Apparently the smoke generated by the 1949 health insurance debates almost smothered the fire of interest, because it was not until 1965, when the Health Insurance Act for the Aged was passed, that any comprehensive type of "national" health insurance was adopted in the U.S. Under the 1968 act (usually referred to as Medicare) all self-employed and employed persons contribute toward its cost, but since coverage is limited to the aged, in reality it is a national insurance program of somewhat limited scope. Limited though it may be "... a total of 12.5 million persons had vendor payments made in their behalf in calendar 1968, an increase of 26 percent over the estimated total of 9.9 million in calendar 1967. Payments totaled \$3.95 billion with inpatient hospital care and nursing home care accounting for 69 percent of the total. Physicians services accounted for an additional 11 percent."²³

The passage of Medicare was welcomed by some and feared by others. History corroborates the notion

that national health programs generally evolve from programs which cover one or two special groups. Thus it is not completely illogical to argue that the United States has indeed taken that fatal first step toward "socialized medicine." In providing coverage for the aged the United States has *not* followed the pattern typically seen elsewhere. Glaser indicates that

In other countries coverage is first sought for industrial workers, and the aged are included later or never. In most countries where national health insurance does cover the aged, these persons usually must have built up eligibility during prior years as subscribers . . . thus, care for the aged is simply an extension of care for the economically active.^{3, p93}

There are other factors which make the situation in this country unique in a medical insurance sense. Strong labor unions have been instrumental in obtaining more extensive private coverage for larger categories of workers than is provided in any other country. Medical and hospital associations and medical societies (which rarely sponsor health insurance abroad) have also created extensive insurance programs for those who wished to participate. Although most countries have programs which are either entirely public or private, the American tradition seems to be one of contributing government grants to augment inadequate private finances for such things as private hospitals, research centers, and medical schools. Given these atypical features of American medical insurance programs, Glaser feels, ". . . there is no assurance that America will follow the same evolution, unless a general breakdown in medical care unexpectedly occurs."^{3, p94}

Writing in 1966, Glaser indicated that the major medical problems of ". . . high prices, and the control of hospitalization and drug costs . . ." had not become sufficiently acute to precipitate demands for an overall reorganization of health insurance and medical care. The American political and social climate has changed considerably in the last few years, however, and these problems may now be nearing the acute stage. At present it is not unusual to hear statements about the "crisis" in the health services industry.²⁴ Interest in health care legislation reached a peak during 1971. Concern continues, with a number of proposals being reviewed by the House Ways and Means Committee. The programs are varied and they

. . . range from the Administration's National Health Insurance Partnership Act (HR 7741; S1623) to the AFL-CIO's Health Security Act (HR 22; S3), sponsored by Representative Martha W. Griffiths (D Mich) and Senator Kennedy. There also are major proposals offered by the American Medical Association, the Health Insurance Act (HR 4960; S 987), and by the insurance industry, the National Health Care Act (HR 4349; S 1490). Each of the proposed plans carries a sizeable price tag, varying, according to a disputed DHEW study, from \$2.6 billion for the Administration's bill to \$59.4 billion for the Kennedy-Griffiths bill.²⁵

Testimonies heard by the House Ways and Means Committee indicated a preponderance of opinion in

favor of some form of national health insurance. Numerous critical issues such as coverage, range of benefits, method of administration, compulsory-versus-voluntary participation, maintenance of quality of care, and the role of the academic health center have not yet been resolved. As Rushing aptly stated: "A major difficulty with such programs . . . is that they frequently do not have the consequences intended for them. Indeed, they may have consequences exactly opposite to those intended; their benefits may be greater for the advantaged than for the disadvantaged."^{26, p21}

Judging from the British experience, if it is decided to initiate some type of national health program, it might be wise to do so over a period of time. Sir John H. Peel, president of the British Medical Association, stated recently that ". . . it would have been far better if the health service had been phased in instead of coming in suddenly as it did."^{27, p10} Perhaps it would be best to attend first to the selective gaps in coverage which seem to be more the problem than large deficits in care.³

ADVANTAGES AND DISADVANTAGES OF NATIONAL HEALTH INSURANCE

The pros and cons of national health insurance may vary with one's orientation. Sociologists and economists might weight the advantages and disadvantages differently, but it would seem that certain facts have been established regarding the effects of medical insurance, both public and private, on the delivery of health care. We are here concerned especially with the effects of national health insurance in relationship to the problems of rising costs, distribution of medical manpower, and the delivery of health care.

An assumption regarding the cost of health care contained in the Brookings Institution report on compulsory health insurance in 1948 appears to have been borne out in principle if not in fact in working with Medicare-Medicaid. It was stated that *compulsory health insurance would increase medical costs* because of, ". . . (a) administrative expenses; (b) the tendency of insured persons to make unnecessary and often unreasonable demands upon the medical care services; and (c) the tendency of some practitioners and agencies to use the system for their own financial advantage." The report's observation that "the adoption of compulsory insurance would not immediately make available adequate medical services for all, because there are not at present the facilities nor a sufficient number of trained and experienced physicians, dentists, and nurses to meet the demand . . ." still applies.¹⁹

Experience with Medicare and Medicaid has illuminated a relationship between medical costs and demand for services. While evidence does not necessarily support the conclusion that recipients have a tendency to make "unnecessary and unreasonable"

demands upon medical services, it would corroborate the assumption that this form of insurance has increased the demand noticeably. The increased demand has coincided with an increase in costs of medical care. For instance, before the introduction of Medicare and Medicaid "... visits to a physician per year varied directly with income class. In fiscal 1967, the first year of Medicare and Medicaid, this pattern changed radically, and those whose incomes were under \$3,000 had as many visits as the highest income class (over \$10,000)."^{28, p80} In this respect, then, Medicare and Medicaid have been effective in making medical treatment more accessible to those who might not otherwise have been able to obtain it.

The positive effect of increased availability is offset, however, by some undesirable side effects. Joseph P. Newhouse and Vincent Taylor, economists with the Rand Corporation, have pointed out that the increasing demand tends to raise prices. Then, "If a shortage situation already exists, widespread introduction of insurance coverage will tend to aggravate an already inflationary situation." Newhouse and Taylor explain the phenomenon as follows:

This happens because insurance shelters people from the full impact of price rises and thus greatly diminishes the normal tendency of rising prices to curtail demand . . . if all expenses were covered by insurance, price increases would be completely ineffective in reducing demand.^{28, p81}

Even higher insurance premiums will not necessarily reduce the demand for insurance. Newhouse and Taylor indicate that the "... risk of remaining uninsured may make insurance seem even more attractive, creating a vicious cycle. This is well illustrated by the current drive for National Health Insurance, which gained major impetus from the medical inflation caused by Medicare and Medicaid."^{28, p82-83} They add that if consumers are to be removed as a force in the marketplace, insurance companies should make certain they "... reward those who produce acceptable care at below average costs and penalize those who fall short of acceptable standards."^{28, p83} The provision of rewards and better cost information might also improve standards and increase the motivation of doctors involved in a national health program. The President of the British Medical Association stated recently that he favored encouraging more private practice in Britain because "... it would improve standards. Human beings, including doctors, are curious things. Once you put them on a rigid salary I think their motivation to improve standards flags a bit. We see this in all walks with the welfare state. Too much security can undermine the best resolutions of any human being."^{27, p10}

If the cost consequences of national health insurance are somewhat mixed with regard to desirability, what about the effect of national health insurance on the distribution of medical manpower and resources? It has already been mentioned that under the Na-

tional Health Service there has been little indication that regional inequalities have decreased since 1962.² Rushing states that the principle of cumulative advantage (disadvantage) tends to increase community inequities under Medicare and Medicaid. That is, "... in the absence of policy constraints which do not now exist, it is likely the inequities will be reduced only at the individual level, and in communities with attractive social and economic characteristics." Furthermore, says Rushing, "Although Medicare and Medicaid may now assure physicians a thriving practice even in economically deprived communities, physicians will have still greater incentive to locate in more attractive communities because of the unmet demand there."^{26, p3}

Glaser believes that the impact on distribution of medical resources under national health insurance is most noticeable in underdeveloped countries. So as he says, "... Americans should not expect spectacular increases in the quality and quantity of medical care under the new statute."^{3, p105}

ALTERNATIVES TO NATIONAL HEALTH INSURANCE

Since the positive effects of national health insurance cannot clearly be shown to outweigh the undesirable effects, one might reasonably ask what alternatives other than maintaining the *status quo* are available. Obviously an in-depth treatment regarding the alternatives is outside the purview of this paper. Brief mention of several promising alternative plans does, however, seem appropriate.

The most serious flaw in the current national health insurance schemes, according to Newhouse and Taylor, is that they cannot transfer money to the sick without subsidizing the price of medical services and interfering with the overall pattern of resource allocation and consumer choice. To offset the subsidy problem they propose a Variable Cost Insurance (VCI) plan. VCI would enable people who choose to be treated in low-cost hospitals to pay less for their insurance.²⁸ Feldstein developed a plan he calls major risk insurance (MRI) and government postpayment loans. He feels the prime economic advantage of MRI would be to enable patients to pay directly for most hospital and physician costs. This would help curb the inflationary effect inherent in current proposals.²⁹ Sidney R. Garfield of Kaiser-Permanente, a private prepaid group practice system headquartered on the West Coast, believes that a health testing program should be instituted. It would assign patients to one of three services — health-care, preventive-maintenance, or sick-care—and this would provide maximum utilization of medical and paramedical resources.³⁰

CONCLUSION

The health services industry in the United States is at a critical juncture in its history. Society itself is

in a state of flux, with powerful forces pulling at times toward a welfare state and at other times toward the maintenance of the dual public-private system which seems unique to America. Whether or not one or a combination of the numerous national health insurance proposals currently being considered in Congress are adopted will have significant implications for the future practice of medicine in this country. While many express concern regarding national health legislation because of its "socializing" effect on American medicine, a more basic concern is, will national health insurance actually eliminate the most serious medical problems confronting us? A historical review of evidence based on the experience of Great Britain with both national health insurance and a National Health Service and an analysis of the economic effects of Medicare and Medicaid seem to indicate that present U.S. proposals will not substantially improve and, in fact, may actually impede the efficient delivery of medical care. Proper representation and perceptive leadership by organized medicine is essential if the basic rights and interests of medical professionals are to be protected.

Members of the medical profession should be actively involved in the consideration of all the alternatives related to national health programs because this group, more than any other will be responsible for their implementation. It is easier for medical professionals to become complacent about health care delivery problems due to overwork, the information explosion, inefficient teaching, etc., than it is for them to assume personal responsibility for informing themselves regarding these issues.

A number of European countries have had considerable experience with national health insurance, and their experiences should be carefully analyzed to ascertain not only the effectiveness of the plans, but also their practical applicability. On the basis of thorough examination, sound decisions regarding the adoption of similar programs or the development of totally new systems could be made.

If American citizens are to be expected to exer-

cise sound judgment in relation to their health care, reliable information must be available for examination. Furthermore, if the consumers and providers of health care fail to keep abreast of developments in the health care field, they may be more apt to repeat past errors or less capable of *creating* new programs to help us move in the direction of upgrading the quality of life for all people.

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The most obstinate of all the eruptions incident to children are, the *tinea capitis*, or scabbed head, and chilblains. The scabbed head is often exceeding difficult to cure, and sometimes indeed the cure proves worse then the disease. I have frequently known children seized with internat disorders, of which they died, soon after their scabbed heads had been healed, by the application of drying medicines. The cure ought always first to be attempted, by keeping the head very clean, cutting off the hair, combing and brushing away the scabs, etc. If this is not sufficient, let the head be shaved once a week, washed daily with soap-suds, and gently anointed with a liniment made of train oil, eight ounces, red precipitate, in fine power, one drachm.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 378.

A Student's View of the A.M.A. Proposals For Health Care Legislation

Patrick B. Mullen

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed. . . .

THOMAS JEFFERSON

Where the slaves ceases, and the master of slaves ceases,
Where the populace rise at once against the never-ending
audacity of elected persons. . . .
There the great city stands.

WALT WHITMAN

THE severity of the "health care crisis" in the United States is determined by one's perspective. The social worker sees deficiency diseases and drug addiction in the slums. The doctor sees a fat patient who can't pay his bill because he just bought a new Cadillac convertible. The statistician sees peril in numbers—patients stacked in a mound like a curve on a graph. Who is right? No one, of course. The only truth is complexity, and the problem is complex from any perspective. The important thing is for all of us to listen to each other, because we are all involved.

The problem is one of finances, distribution, and the nature of the medical services available to people throughout the United States. All these factors intertwine and modify each other. No proposal can succeed that does not take into account all the elements of the problem and all the possible interactions of these elements. One part that is neglected in many schemes is the character of the diseases that will be dominant in the future. Chronic and custodial care will increase as we prolong life past

natural expectancy. We have created kinds of disease that, because they are ugly and expensive to treat, do not fit easily into legislative categories. The heroic interventions of modern medical research pose problems similar to those of chronic care; for these enterprises are very expensive and they also affect the pattern and tone of the whole medical system, from the allocation of resources to the purposes of treatment. Whatever the final programs, many arbitrary decisions will be made at their onset, and new problems will arise as times change. The trick will be to design programs with enough hard bone and muscle to do the job, but enough cartilage to allow for adjustment and growth as the demands of the job change.

The American Medical Association proposal for financing health care is the subject of this report. Although the problem involves more than money, the presence of dollars is a crucial part of any solution, and the AMA has chosen to focus on this aspect. Two questions are important: Does the bill provide an acceptable way of financing health care? And, Do the financial arrangements imply flexible and strong connections to the other necessary parts of an overall social health program?

CRITERIA

At a national conference on major issues in national health insurance held at Sun Valley, Idaho, in 1971, Herman and Anne Somers provided some excellent criteria for any acceptable scheme of national health care. I quote directly from their paper:

1. Universal coverage of the resident population without distinction as to income or premium contributions.
2. Equitable financing, with multiple sources of funds funnelled through a single mechanism. (This refers only to the central provisions of an overall fund.)

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3. Comprehensive and balanced benefit structure.
4. Incentives to maximize efficiency and the effective use of resources to discourage health care price inflation.
5. Pluralistic and regulated competition in underwriting and administration
6. Consumer options in respect to carriers, providers, and delivery systems, as far as geographically feasible, on an informed meaningful basis.
7. Administrative simplicity.
8. Flexibility for adaptation to changing circumstances and public preferences.
9. General acceptability to providers and consumers.

These standards are deceptively simple and obvious. They seem to be the elemental components of any national plan that might succeed. Nevertheless, given political necessities, financial exigencies, and all the great demands and compromises necessary in social programming, insuring that these simple criteria will be met is indeed difficult.

The AMA plan has been introduced in the U. S. Senate as the Health Care Insurance Assistance Act (S. 987). Before attempting to evaluate it against these standards, let us proceed to a brief exposition of its main features, as summarized admirably in an appendix to the Somers report. Again I borrow from them.

The general approach of the bill is that of a voluntary program of health insurance, under which the federal government would pay premiums for the poor, and allow income tax credits for all others toward the purchase of private health insurance plans. The amount of tax credit would include 100 percent of the premium charges for catastrophic insurance plans, as determined by prolonged hospital care, and also an income-related percentage of premium charges for other health insurance providing certain basic benefits approved by the government. Medicare would continue as at present.

The AMA scheme would include everyone. For those with incomes too low to be taxed, the federal government would pay all their health insurance premiums. For everyone else, the government would pay a decreasing share of the premiums, from 100 percent until those with a tax liability of \$891 or more would receive a tax credit of 10 percent. Thus the federal support of the individual would decrease in proportion to his ability to finance his own insurance program. Catastrophic coverage would be largely subsidized for everyone, regulated only by a sliding scale of deductibility.

The scope of the benefits offered by any policy would have to include the following in order to qualify for the tax credits offered in this program.

1. Sixty days hospitalization (with extended care days counting as one-half hospital days, or two days of extended care for each hospital day, including nursing services, drugs, blood, appliances, maternity and psychiatric care, and physical therapy—subject to \$50 deductible.)
2. Emergency or outpatient services including diagnostic services, x-rays, lab tests, etc.—subject

to 20 percent co-insurance on the first \$500 of expense.

3. Medical care by physician, in hospital or office, including diagnosis and treatment, psychiatric care, immunizations, physical exams, lab services, radiation therapy, maternal and well-baby care—subject to 20 percent co-insurance.

4. Dental or oral surgery, ambulance service—subject to 20 percent co-insurance.

5. Catastrophic illness provisions beyond basic coverage, including hospital services, extended care services (limited to 30 additional days), outpatient blood, prosthetic aids—subject to graduated corridor or deductible expense based on a family's or individual's taxable income, on the following scale: 10 percent on the first \$4,000, 15 percent on the next \$3,000, 20 percent thereafter.

The program would pay providers according to the usual and customary charges for all services, including hospital and extended care.

A health insurance "advisory" board would be the basic unit of central administration. It would write policy and regulations. Private insurance companies would administer their own approved policies.

The cost of health insurance for the poor would be met by federal general revenue expenditures and by reductions in federal income tax collections for those receiving tax credits.

The AMA estimates the cost of the program to be \$14.5 billion for the first year.

CRITIQUE

Superficially the AMA program seems quite good. It provides a means of financing the medical care of everyone in the nation in a way that offers maximum flexibility in administration and approach once the basic structure of benefits of a given policy meets the criteria established by the national board. It does not demand a single system of medical care delivery, nor does it specifically inhibit the patient's choice of physician, facility, or method of financing. It relies heavily on the ability of the individual citizen to provide for himself.

One specific intent of the bill is to avoid the creation of another large federal bureaucracy, depending largely on the administrative machinery of private insurance companies to prepare policies and distribute policy programs. It offers tax incentives as a means of gaining voluntary participation in insurance coverage.

The bill is a beautiful example of the use of indirect means—tax incentives, financial rewards—to achieve voluntary cooperation with the federal government. It is expressly designed to avoid federal intervention, as far as possible, and yet attack the problem in some way.

Judged by the Somers criteria, the program does quite well. It fulfills the requirement of universal

coverage, with the important qualification that the individual must seek such coverage. Insurance will be available rather than compulsory. The method of financing seems equitable, although some insurance companies will no doubt reap inordinate benefits under the program. The incentives to maximize efficiency exist within the mechanisms that should operate upon the insurance industry — namely, the rules governing the market place — profits being one great motive for efficiency. There is pluralistic and regulated competition in underwriting and administration, although, again, this depends on the mechanisms of the private insurance companies.

The benefits to the consumer are comprehensive and balanced. He has every possible option concerning carriers, providers and delivery systems—except, practically speaking, certain geographic regions will be more or less well provided for according to the insurance resources already present in the region. It can be hoped that the private companies will behave in a responsibly cooperative way to educate and aid their clients.

The administrative structure of the program is extremely simple, at least from the standpoint of the federal government, although certain subtle complexities are hidden in the bill. I am certain that the Health Insurance Advisory Board will find itself undermanned, in the beginning, to deal with the welter of policies that will be presented for approval. Such matters are always more complicated than they first appear. The AMA believes that the proper level of administration can evolve much more easily from a frugal beginning than from an already fat and arthritic bureaucracy. The bill satisfies the criteria of adaptability, erring perhaps in giving too much freedom to individual preference and the interests of private insurance companies; no one knows how much regulation would be required. Overall, however, the program does seem to be generally acceptable to everyone involved.

Of course, the proposed bill leaves many problems unsolved, but it does provide for a fairly comprehensive financial program that should cover the medical expenses of the people. Also, the mechanisms seem quite adaptable to any subsequent programs affecting the distribution and organization of services.

There are important flaws, however. The Somers point out three critical ones.

1. It is open-ended as to costs. There are no cost controls or efforts toward containing the costs in any way. Providers are paid on the customary basis.
2. There are no efficiency incentives for providers or carriers. This might lead to more health-care inflation than we have at present.
3. There is no administrative mechanism by which government can protect its financial commitment. The only control the government exerts is that of approving qualifying policies, assuring

that they meet minimum standards, and this would depend heavily on state insurance departments.

The Somers also point out that programs based on tax incentives to induce voluntary compliance will never achieve universal coverage. There will always be people who find some excuse for not enrolling.

I think the AMA's answers to these criticisms would involve as much philosophy as political science. About the possible lack of voluntary cooperation, I think the AMA would not be troubled. If a citizen chooses not to cooperate with a program designed to benefit him, a program for which he pays taxes, then so be it. Let him take the consequences. But the people must be well informed before they can be expected to give full and intelligent cooperation, as I'm sure the architects of the plan realize.

A question that could be raised more legitimately involves tax incentives: Are they large enough? And do they work equitably on small and large employers alike? The problem lies in both the tax mechanism in general and in the specific tax mechanisms proposed by the AMA. I tend to favor the mechanism, for it is subtle and indirect, but I do not know if the proposed incentives are adequate to accomplish the desired ends.

As for the other criticisms, I think the AMA would answer that the profit motive—the competition between carriers to provide the best policies at the cheapest prices—would insure the desired efficiency. The government would insure that minimum standards were met; then Adam Smith's invisible hand would insure a minimum of administrative waste and little excess financial baggage in the whole system. Here again, I am not sure that such mechanisms would operate as smoothly as the architects seem to think. I don't know that they wouldn't operate smoothly either, but it does seem that some more rigorous central direction might be necessary to achieve the desired standardization for the entire country.

As for the open end of the federal money barrel, I think this feature was included so that there would be no restrictions on the kinds of services available through the program. Once someone elected to participate, he could have any kind of therapy his physician ordered, without being concerned with federal budget restrictions. That would be ideal, but again, I am not sure that it is practicable. Any program that offers suddenly to pay for the medical care of the poor people in this country, plus everyone else's, will entail great expenses. I am not sure the AMA's proposals are altogether fiscally sound in this respect, although they do seem more sound than many other programs that have been proposed.

SUMMARY AND CONCLUSION

I like the AMA program. It offers a commendably moderate approach in order to avoid the ogre of

bureaucracy. It offers a commendable reliance on private companies and the resources they already bring to bear on the problems. It offers tantalizing financial savings that many other programs do not—although this is perhaps a specious promise. It offers a limited approach that does not pose as a panacea. And, lastly, it is offered by the medical profession, thereby insuring a large degree of cooperation and implying an obligation for further programs.

None of these advantages can be dismissed lightly. However, one has the ghost of a doubt about exclusive reliance on the mechanisms of the marketplace. It seems that some greater central authority will be necessary for the program to accomplish its ends. The economics of the situation are extremely complex. The only sure thing about any economic manipulation is that the results will always be more complicated and less well controlled than was intended.

All social schemes are labyrinths of resource and finance. As we work through the labyrinth of a national health care plan we must be cautious, for the corridors are ill lit and we are likely to find a Minotaur at every turn.

ACKNOWLEDGMENT

I am grateful to Dr. Robert Smith, Chairman, Department of Family Medicine, School of Medicine, University of North Carolina at Chapel Hill, who first introduced me to this whole area of debate and gave me the opportunity to write this paper.

Also, my debt to the Somers' report is obvious. I have read the AMA's reports about the bill, but I found the Somers' synopsis of the key features a little more usable for this paper. Because of the extent of my debt to the Somers' report, I decided to acknowledge its source in the body of my paper, not in footnotes, and merely cite the full title of the report in the references.

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Chilblains commonly attack children in cold weather. They are generally occasioned by the feet or hands being kept long wet or cold, and afterwards suddenly heated. When children are cold, instead of taking exercise to warm themselves gradually, they run to the fire.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 380.

Editorials

NORTH CAROLINA MEDICINE IN RETROSPECT

For Roscoe McMillan, M.D., patriarch of North Carolina physicians, the publication of the *North Carolina Medical History* by the University Press marks the fruition of a dream. These volumes are his reward for years of total dedication to a project designed to record, for the first time in manuscript form, historical highlights of medicine in North Carolina.

This is not the work of a professional historian, but the combined effort of many authors to preserve for generations to come significant events and personalities in medicine. There is need to be aware of history in an era of change that threatens disruption of the old and the creation of new systems of health care. Not all men are history buffs, but to prepare for the future a knowledge of the past is vital. Let us temper what we do with the wisdom of our predecessors.

These books should grace the shelves of every physician's library as well as the libraries of educational institutions. Publication of the *North Carolina Medical History* affords an opportunity for those interested to make a lasting contribution to a library of choice. The History is available from the Headquarters Office of the Medical Society.

J.S.R.

YOGURT

Physicians and layman alike recognize that there are fashions in food as well as in clothing, cars and so forth. Yogurt is now in style in this country, and can even be found in vending machines here in North Carolina, something which would have seemed unlikely a decade or more ago. The medical ties of the yogurt fashion are interesting ones, and since most physicians never took up the subject in medical school, they need to learn enough to stay ahead of their patients who include it in diets.

Yogurt is prepared by the fermentation of milk, either whole or skim, using special strains of lactic-acid-producing bacteria. The process is extremely old, and receives mention in Genesis, when Abraham serves sour* and sweet milk along with a calf while

entertaining the three angels. This ancient process is carried on by many U. S. families of Balkan and Middle Eastern origin; their custom in the old country has been to save any milk left over from the day's use by inoculating it with a "starter" containing the proper bacteria. It was the only way they could preserve this perishable food in the days before refrigeration. After the organisms had done their work (judged by when a spoon would stand upright in the yogurt), the food was either eaten or, if in excess, dried for later reconstitution with water. The process of drying and reconstitution is now mainly limited to rural areas of the Middle East; the dried product—*kashk*—is made into 3 to 5 cm spheroids and is carried by the tribal militia in Iran (together with unleavened bread, and sulfa powder!).¹ Although the mechanical refrigerator and other processes have obviated this need for yogurt-making, its gustatory and nutritional characteristics keep it on the menu of those who make it at home, and have added it to the menu of those whose culinary background never included yogurt. When made from skim milk, yogurt has about 11-13 calories per ounce, depending on what type of low-fat milk is used to make it. Made from whole milk, the caloric value is 19 per ounce. However, very little plain yogurt is sold; the types consumed in greatest quantities are low in fat, but contain much carbohydrate from added fruit, and average about 32 calories per ounce. The public tends to forget that "low-fat" doesn't necessarily mean "low-calorie."

A year or so ago yogurt eaters were in some cases scared by a report of animal experiments² which they interpreted as indicating a danger of increased incidence of cataract when that food was taken. In fact, the rats in question were fed exclusively on yogurt, and rats are deficient in galactose-1-phosphate-uridyl transferase, an enzyme needed to metabolize the galactose which constitutes 2.3 per cent - 3 per cent of yogurt. Aside from the rare human being with galactosemia, the work with rats is probably not relevant to the human situation.

Physicians of years gone by included soured milk preparations in their patient's diets, although the exact indications are not clear from what one reads. For example, during the long period between the shooting of President Garfield and his death, feeding him was a major problem. One of the items in his diet was koumiss, mare's (or camel's) milk subjected to alcoholic fermentation, representing another way

*Although the King James version (Genesis 18:8) has him serving butter instead of sour milk, the original Hebrew word is *Chemah* which has as its modern equivalent the Arabic word *leben*, which is used to describe soured milk preparations of the sort under discussion (Brown F. Driver SR, Briggs CA: A Hebrew and English Lexicon of the Old Testament, Oxford: Oxford University Press, p 326, 1955). The Revised Standard Version transliterates the Hebrew as "curds," which is closer but not fully descriptive.

of preserving milk favored among some ethnic groups; similarly fermented cow's milk is called kefir or kephir. This alcoholic fermentation is practiced by the Turkoman people of Iran and the Soviet Asian republics.

Thus fermented milk has maintained some medical association down through the ages. Perhaps it should be no surprise, therefore, that a major interest in yogurt came from the attention paid it by that great figure in early medical microbiology, Elie Metchnikoff (1845-1916), whose work on phagocytosis made him a Nobel laureate in 1908. In middle age, Metchnikoff became interested in the aging process, and wrote considerably about it,³ at the level of the educated layman. With his vast reputation, what he said got a great deal of attention; the situation is comparable to Linus Pauling and his present advocacy of vitamin C for colds. Metchnikoff noted that in areas where people of extreme old age abounded there seemed to be a lot of soured milk consumed, but he thought that alcohol had a long-term detrimental effect, so he never favored milk soured with that type of organism. His view was that lactic-acid producing bacteria, his favored one being *Bacillus bulgaricus* (latterly called *Lactobacillus bulgaricus*), suppressed the activity of "organisms of putrefaction." These organisms had a harmful effect on phagocytosis, he felt, and phagocytosis was a keystone in the healthy body, of course. Populating the bowel with lactic-acid producers could not help but be beneficial, he felt.

At present, yogurt is made with mixed cultures of *L. bulgaricus* and *Streptococcus thermophilus*, which give better flavor. These organisms do not survive gastric acidity, so Metchnikoff's original idea is not maintained with modern yogurt. However, in the years immediately following popular notice of his publications the milk suitably inoculated with *L.*

acidophilus (which will survive the stomach) was available to the public in many areas. "Acidophilus milk" was once available in stores, and in 1935 the Yale Press could publish a monograph on the medical use of the organism.⁴ Perhaps the only remaining aspect of his interest in the aging process that received attention is the idea that immunity and aging are related. Thus if Metchnikoff was right, if yogurt did favorably affect the immune status of the individual, aging might be retarded. But the experiments haven't reached the literature if they are being done.

One final word needs to be said about the home-brewed variety of yogurt. Some of the Sunday comic sections of our states' papers recently carried a yogurt recipe, and one of the surprise best sellers of the past year had a similar formula.⁵ Persons following their directions might be able to make good yogurt, but they might not have sufficiently good bacteriologic technique to keep the culture pure as they mixed and incubated the ingredients. Thus a few undesirable contaminants like *Salmonellae* might provide unexpected postprandial events, or bacteriophage might affect the original yogurt culture and alter the product. At least some of the health food devotees are not noted for their sanitary practices, and physicians may see some interesting epidemiologic situations if they inquire more closely about dietary habits. Alcoholic home brew isn't the only type of kitchen fermentation that might turn out to be a mistake!

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4. Rettgar LF, Levy MN, Weinstein L, Weiss JE: *Lactobacillus acidophilus* and Its Therapeutic Application. New Haven: Yale University Press, 1935.
5. Lundquist J: How to Make Yogurt. In: *The Last Whole Earth Catalog*. Canada: Random House, 1971, p 194.

When an infant is troubled with gripes, it ought not at first to be dosed with brandy, spiceries, and other hot things, but should have its body opened with an emollient clyster, or the medicine mentioned above (*magnefia alba*); and at the same time, a little brandy may be rubbed on its belly with a warm hand before the fire. I have seldom seen this fail to ease the gripes of infants. If it should happen, however, not to succeed, a little brandy or other spirits may be mixed with thrice the quantity of warm water, and a teaspoonful given frequently till the infant be easier. Sometimes a little pepper-mint-water will answer this purpose very well. — William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines*, etc., Richard Folwell, 1799, p. 372.

Committees and Organizations

COMMITTEE ON CANCER Southern Pines, Sept. 28, 1972

The Committee approved and requested the approval of the Executive Council that the North Carolina Medical Society go on record as approving nurses doing Pap smears in the public health clinics and multiphasic clinics, and approved the instruction and training of nurses to do Pap smears at the community college level.

The Committee approved the policy of standing by the existing policy of treating only curable cancer patients under the State Board of Health cancer funds for patients unable to finance their own treatment.

The Committee passed a motion to stand firm on its policy and not approve the use of State Board of Health funds for the treatment of multiple myeloma, since there is no known cure.

The Committee also recommended that the empty beds in the four tuberculosis sanatoria be used for the care of chronic and terminal cancer patients.

LEWIS S. THORP, M.D.
Chairman

COMMITTEE ON DRUG ABUSE Southern Pines, Sept. 29, 1972

Mr. Roy Epps gave his report on the status of community drug abuse programs. He presented the budget report of the North Carolina Drug Authority for 1972-1973. He used charts to demonstrate the breakdown of the seven categories — treatment, enforcement, research, education, vocational rehabilitation, training, and administration — to which money was allocated. The total amount of the budget is \$3,958,841. Mr. Epps said that this represents an investment in 18 local drug programs, the major ones being developed in Charlotte, Cumberland County, Greensboro, Durham, and Raleigh.

Mr. Epps next presented statistics on drug admissions to psychiatric hospitals, the four mental institutions in the state, clinics, and ARC's. The total in 1970, he said, was 136; in 1971 it was 835. According to statistics furnished by the Department of Mental Health, drug deaths termed accidental totaled 78 in 1970, and 94 in 1971, the leading drug killer being heroin.

Mr. Epps presented charts showing the breakdown on North Carolina drug arrests for the years 1970, 1971, and the first six months of 1972. He stated

that for the first six months of 1972 there were 2,695 arrests, a number which surpasses the total of 2,240 for 1970 and almost equals the total of 2,697 for 1971. There were 524 heroin arrests for the six-month period as opposed to 624 for all of 1971, and 457 for 1970. Marijuana, he stated, has had the greatest increase, with 1,519 as opposed to 1,155 in 1971. This means that for the calendar year 1972 marijuana arrests would exceed 3,000 and heroin arrests would exceed 1,000. He noted that as of June 30 only 386 people were serving time in the state prison system for drug offenses, though the total figures over the past two and one half years would represent more than 7,500 drug arrests. These figures, Mr. Epps stated, are the key to the reason that enforcement hasn't been as effective as it should have been as a deterrent against those dealing in drugs and using drugs, because judgment hasn't been sure and swift. He noted that, in many cases in North Carolina, pushers have been arrested several times without ever having served time. After a lengthy discussion of the problem, the following statement was passed unanimously:

The Committee on Drug Abuse recognizes that there is a tremendous backlog of drug abuse cases in the judicial system; that important to treatment is early and prompt handling in the judicial system; and that the judicial system can provide motivation for drug dependent individuals to accept treatment, as has been proved in treatment programs across the nation.

Therefore, this Committee recommends that the Drug Authority be urged to coordinate the attack on the problem of early disposition of cases with the court system, the Bar Association, and other appropriate agencies, to the end that drug abusers will be dealt with promptly and effectively.

Dr. Benjamin E. Britt gave a report on the proposal for 20- to 30-bed treatment units at the four state hospitals. He stated that the last Legislature passed a mechanism which did two things: (1) It put the primary emphasis of drug abuse at the community level, and (2) it appropriated state funds to pay for these programs. Now, after two years of operation every one of those programs is finding that it can't handle the total problem in the community — that they need some resource for back-up. Dr. Britt said that he feels there should be one good

central state back-up program that could be a resource for all the developing community programs. He stated that a request had been submitted to the Advisory Budget Commission for a central back-up program that would provide 30 beds, to be expanded to 50 beds during the biennium. Copies of this request were distributed to members of the Committee. The Committee then discussed a suggestion of Mr. Epps that the Advisory Budget Committee be requested to fund the Drug Authority, which in turn would contract with the Mental Health Department or any other agency that could do the job. The following recommendation was then approved unanimously:

The Committee on Drug Abuse approves in principal that

WHEREAS, community-based treatment programs are finding the need for a back-up program which need not be duplicated in every community,

Therefore, it recommends that at least one major drug abuse treatment program be developed to provide back-up resources to these community programs; that this program could include short-term inpatient services for evaluation, detoxification, planning, and orientation for return to the community, and might also include a forensic program, a toxicology laboratory, medical-surgical care programs, and services such as consultation to and training for drug abuse treatment personnel in community-based treatment centers.

Dr. Britt stated that over the last several years local citizens have been trying to do something about the drug problem, resulting in the establishment of what we call "rap houses." These nonprofessional centers, usually staffed by interested individuals on a part-time basis, are beginning to tie in with local resources, often the local mental health center. The mental health centers have received money from the state for combatting drugs in the community, and these funds have been used to support the rap houses in their second year of operation. They received only voluntary contributions during the first year. Dr. Britt said that it appears to him that the best service the rap houses can render is an outreach program that will bring the resources of the community to the target population, and bring the target population back into the resources of the community. He felt that if the Medical Society would get behind the rap houses, they would emerge as the focus of the drug treatment program.

Dr. Rockwell raised the question of whether to conduct another survey of physicians regarding the treatment of persons with drug problems. He stated that money had already been requested for this purpose if the Committee so desired. Mr. Epps said that as of Jan. 1, 1972, the law now requires every physician who provides treatment or rehabilitative services to persons dependent upon drugs to furnish statistical information periodically to the Drug Au-

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Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy or bronchial asthma. Hemolysis, frequently dose-related, may occur in glucose-6-phosphate dehydrogenase-deficient patients. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: **Blood dyscrasias:** Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia; **Allergic reactions:** Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival scleral injection, photosensitization, arthralgia and allergic myocarditis; **Gastrointestinal reactions:** Nausea, vomiting, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; **C.N.S. reactions:** Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; **Miscellaneous reactions:** Drug fever, chills and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

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thority on request. It was agreed that this law eliminates the need for another survey, but that the Society should encourage physicians to cooperate with the Drug Authority in supplying the information. The Committee therefore adopted the following recommendation:

The Committee on Drug Abuse requests President Glasson to include in his President's Newsletter information on the new law which has gone into effect: "Commencing January 1, 1972, every practitioner that provides treatment or rehabilitative service to a person dependent upon drugs is required by G. S. 90-109. 1 (c) to make periodically a statistical report to the director of the North Carolina Drug Authority."

The Committee further advises the Society that they should expect such a request from the N. C. Drug Authority and encourages physicians in the Society to respond promptly when they receive such a request.

Ways of disseminating new information on drug abuse were discussed. Mr. Epps said that a newsletter issued by the Drug Authority had been suggested, but that funds were not available at this time. The following statement was adopted unanimously:

The Committee on Drug Abuse approves in principle that funds be appropriated in the Department of Mental Health or the N. C. Drug Authority for the dissemination (via a newsletter, for example) of information on drug abuse to physicians and other interested persons across the state of North Carolina.

The next item brought before the committee was Report F, the Medical Society's policy on drug abuse and drug dependency. Dr. Rockwell said that since the pamphlet stating this policy had been printed, an amendment had been made to Resolution 1, against the use of amphetamines and methamphetamines. He said that the Committee had been asked to decide whether an additional supply of these pamphlets should be printed to include the revised resolution. The Committee decided to defer action until the next meeting.

Mr. Epps distributed copies of the "Physicians Reference on Drug Laws and Treatment," which the Drug Authority is planning to publish, and requested the Committee's opinion. The following recommendation was adopted unanimously:

WHEREAS, the Drug Authority is undertaking publication of a monograph entitled "Physicians Reference on Drug Laws and Treatment," and

WHEREAS, the Committee on Drug Abuse finds the draft of the above monograph compact and containing information both useful and necessary to physicians practicing in North Carolina, and

WHEREAS, the Drug Authority has undertaken under its own funds to gather statistical informa-

tion on drug abuse from physicians throughout the state, which information was previously obtained through funds supplied by the Medical Society, Therefore, the Committee on Drug Abuse requests that \$4,000 be appropriated to the Committee in order that it can mail the aforementioned monograph to North Carolina physicians.

WILLIAM J. K. ROCKWELL, M.D.
Chairman

COMMITTEE ON MEDICAL EDUCATION **Southern Pines, Sept. 27, 1972**

The Committee approved a resolution that the North Carolina Medical Society go on record as supporting a strong continuing education program for members in order to insure optimum physician performance, but that this program not be compulsory.

RICHARD H. AMES, M.D.
Chairman

COMMITTEE ON MENTAL HEALTH **Southern Pines, Sept. 28, 1972**

The Committee approved the following statement:

The Committee on Mental Health Recommends the resolution brought to the AMA House of Delegates on National Health Insurance and Implications for Mental Health, as follows:

WHEREAS, some health insurance programs do not provide adequate coverage for mental illness; and

WHEREAS, some congressional proposals for national health insurance programs also discriminate against patients suffering from nervous and mental disorders: therefore be it

Resolved, that the House of Delegates of the American Medical Association affirm that all insurance programs, all regulations and all legislation pertaining to health insurance should include provisions that benefits for hospitalization and treatment of acute mental illness be identical to those provided for somatic illness; and be it further

Resolved, that a copy of this resolution be submitted to the Department of Health, Education, and Welfare and to the representatives in Congress.

PHILIP G. NELSON, M.D.
Chairman

COMMITTEE ON RELATIVE VALUE STUDY **Southern Pines, Sept. 29, 1972**

The Committee, after lengthy discussion, approved a motion to the effect that the Committee should take the Current Procedural Terminology (published by the AMA) and put in the values as recommended by the different specialties, thereby being ready when the new schedule comes out. In regard to plastic surgery, which is the only specialty not having submitted recommendations, that the Committee should use the values in the California schedule.

ARTHUR E. DAVIS, M.D.
Chairman

Bulletin Board

NEW MEMBERS of the State Society

Allen, David Henry (Intern-Resident), Child Guidance Clinic, Trent & Elba Streets, Durham 27705
Baumrucker, John Frederick, GP, Box 1060, Highland
Barbe, Robert F., Oph, Tarboro Clinic, Tarboro, NC 27886
Boerner, Robert Martin, I, 16 W. Doctors Bldg., Asheville 28801
Callaway, Samuel Clayton, Jr., OALR, Suite 10-A Murchison Bldg., Wilmington 28401
Carter, Philips John, Or, 1311 N. Elm St., Greensboro 27401
Carter, James Walter, S, 1800 W. Fifth St., Greenville 27834
Cole, Andrew Travis, U, 504 Sharon Road, Chapel Hill 27514
Dysart, George Barton, MD, GP, Box 363, Etowah 28729
Gaither, Robert Huth, MD, ObG, 602 East St., Albemarle 28001
Gollberg, Harold Ronald, MD, P, 130 W. Avon Parkway, Asheville 28804
Jones, Robert Boyd, MD, Otol, Suite 10-A Murchison Bldg., Wilmington 28401
Kramer, Richard Spencer, MD, NS, Duke Med. Ctr., Box 3255, Durham 27710
Knox, Angelina Vinluan Edralin, MD, Pd, 3405 Bragg Dr., Wilmington 28401
Lang, Stephen Norman, MD, Or, 306 S. Gregson St., Durham 27701
McDaniel, Wm. Jason, Jr., MD, Or, 304 Hickory Dr., Chapel Hill 27514
McIntyre, Donald Kenneth, MD, GP, 831 Shady Lawn Rd., Chapel Hill 27514
McNeill, Donald Drake, Jr., MD, Path, 502 Tremont Park Dr., Lenoir 28645
Newton, Philip Thomas, Jr., MD, Pl, 313 Stonewall Jackson Drive, Wilmington 28401
Noell, Karl Thomas, MD, I, 107 Wilderness Road, Tryon 28782
Packer, John Wesley, MD, Or, 1504 Manly St., Chapel Hill 27514
Pendse, Prabhakar, Damodar, MD, S, 309 E. Wendover Ave., Greensboro 27401
Rardin, Thomas A., MD (Renewal), Doctors Park, Asheville 28801
Reynolds, James Woodrow, Jr., MD, ALR, 417 Wake Dr., Salisbury 28144
Rowe, Charles Eugene, Jr., MD, U, 624 Quaker Lane, High Point 27262
Sahba, Mehrdad Majdzadeh, MD, I, Apt. F-10, 1829 Front St., Durham 27701
Sheikholislam, Mohamad Jafar, MD, Anes, 10b1 Anderson St., Durham 27707
Taylor, Allen, MD, R (Renewal), 1711 W. 6th St., Greenville 27834
Watson, Nat Erskine, Jr., MD, I, 1407 Georgetowne, Gastonia 28052
Warren, Edward Shaw (Student), 1105 W. End Blvd., Winston-Salem 27104
Warren, Petra Elisabeth (Student), 1105 W. End Blvd., Winston-Salem 27104

WHAT? WHEN? WHERE?

In Continuing Education December, 1972

I. Current Events in North Carolina

The Council on Practice of the North Carolina State Nurses' Association has developed baseline information concerning standards of nursing practice for all nurses in North Carolina. This information is in the form of "learning packets" which are to be used as guides or reference material in discussion programs. Packets are available free on loan with either transparencies or slides, discussion guidelines, and a bibliography. For more information write to: North Carolina State Nurses' Association, P. O. Box 12025, Raleigh, North Carolina 27605

The Department of Medical Education of the Edgecombe General Hospital and the Tarboro Clinic, with the assistance of the University of North Carolina School of Medicine and the Duke University Medical Center, has arranged for a series of comprehensive continuing education study programs on "THE CARE, DIAGNOSIS, TREATMENT, AND MANAGEMENT OF PULMONARY DISORDERS." All the area physicians and allied professionals are invited to participate in the study programs.

Jan 9 "Operational Expertise for Pulmonary Lab Technicians"

Jan. 16 "Drug Therapy and the Treatment of Pulmonary Disorders"

Jan. 23 "Role of Allied Professionals in Care and Treatment of Pulmonary Disorders"

The format for each of these programs will be, lecture 1:30-2:30 p.m. and consultation 2:30-4:30 p.m.

All lectures will be held in the Edgecombe Hospital Learning Lab (Conference Room).

For Information: The Department of Medical Education, Edgecombe General Hospital, Post Office Box 45, Tarboro, North Carolina 27886, Telephone: 823-4101, extensions 351 or 313.

II. Coming Events in North Carolina Jan. 25-27, 1973

Nathan A. Womack, Surgical Society

Sponsor: Department of Surgery

For Information: Oscar L. Sapp, III, M.D., Associate Dean for Continuing Education, UNC School of Medicine, Chapel Hill 27514

Jan. 26-27

Third Annual Surgical Symposium

Place: Babcock Auditorium

For Information: Emery C. Miller, M.D., Associate Dean for Continuing Education, Bowman Gray School of Medicine, Winston-Salem 27103

Jan. 26-27, 1973

Conference for Medical Leadership
Place: The Carolina, Pinehurst
Sponsored by: North Carolina Medical Society, Committee
on Public Relations
All members invited.

III. Out of State (through March, 1973)

Dec. 1

Ware Residents Programs
Place: School of Medicine, MCV
For Information: Department of Continuing Education,
Health Sciences Division, Box 91, Medical College of Vir-
ginia, Richmond, Virginia 23219

Dec. 8-9

Current Concepts in the Treatment of Infectious Diseases
Co-sponsor: Center for Disease Control, Atlanta
For Information: Medical University of S.C., 80 Barre St.,
Charleston, S. C. 29401

Dec. 14-15

Otolaryngology for the Family Physician
For Information: University of Tennessee College of Medi-
cine, 800 Madison Avenue, Memphis, Tennessee 38103

Dec. 19

Course in Oral Surgery—Surgical Orthodontics
Co-sponsor: Tennessee Mid-South RMP
Registration Fee: \$50
For Information: Vanderbilt University School of Medicine,
Division of Continuing Education, 110 21st Ave., S.,
Nashville, Tennessee 37203

Jan. 5

Medicine & Religion Symposium
For Information: Medical College of Georgia, 1459 Gwin-
nett St., Augusta, Georgia 30902

Jan. 8-10

3 Days of Liver Disease
Place: Royal Coach Motel, Atlanta
Co-sponsor: Emory University
Fee: \$80 ACP members, FACP, residents, & resident fel-
lows; \$40 Assoc.; \$125 nonmembers
For Information: American College of Physicians, 4200 Pine
St., Philadelphia, Pa. 19104

Jan. 8-11

The Alton D. Brashear Postgraduate Course in Head and
Neck Anatomy
Place: School of Medicine
Sponsored by: Department of Anatomy
For Information: Department of Continuing Education,
Health Sciences Division, Box 91, Medical College of Vir-
ginia, Richmond, Virginia 23219

Jan. 14

Principles in Diagnosis & Treatment of Infectious Disease
Co-sponsor: University of Tennessee College of Medicine
For Information: Jackson-Madison County General Hospi-
tal, 708 W. Forest, Jackson, Tennessee 38301

Jan. 25-26

Clinical Psychiatry
Registration Fee: \$50
For Information: Medical College of Georgia, 1459 Gwin-
nett St., Augusta, Georgia 30902

February 19-25

Fourth Annual Family Practice Refresher Course
Place: Sheraton-Fort Sumter Hotel, Charleston

Enrollment limited to 75. Tuition: \$140 payable in ad-
vance on or before February 1, 1973.

For Information: Dr. Vince Moseley, Director, Division of
Continuing Education, Medical University of South Caro-
lina, 80 Barre Street, Charleston, S. C. 29401

News Notes from the—

DUKE UNIVERSITY MEDICAL CENTER

Dr. Daniel C. Tosteson, chairman of the Depart-
ment of Physiology and Pharmacology, is the new
chairman-elect of the Association of American Medi-
cal Colleges (AAMC).

He will take over the organization's highest elective
office in November of 1973, succeeding Dr.
Charles C. Sprague, dean of the University of Texas
Southwestern Medical School in Dallas. Duke's vice
president for health affairs, Dr. William G. Anlyan,
was AAMC chairman in 1970-1971.

Tosteson is a native of Wauwatose, Wis., and a
1949 graduate of the Harvard Medical School. Be-
fore going to Duke in 1961 as department chairman,
he was associate professor of physiology at the Wash-
ington University School of Medicine in St. Louis.

In 1971 Duke appointed him James B. Duke
Professor of Physiology.

Tosteson also is president - elect of the American
Physiological Society, a past president of the Society
of General Physiologists, and a past chairman of the
AAMC's Council of Academic Societies. He is a
member of Alpha Omega Alpha, medical honorary,
and the Institute of Medicine of the National Acad-
emy of Sciences, and he has served numerous con-
sultantships to federal agencies and private founda-
tions.

His medical research on the mechanism of move-
ment of salt across the surface membranes of living
cells, a process which is essential for the normal
function of the heart, kidney, brain and other organs,
is supported by grants from the National Heart
and Lung Institute.

* * *

Dr. Page Anderson, a 1963 graduate of the Duke
Medical School and currently an associate in pediatric
cardiology, has won the Young Investigator's Award
of the American Academy of Pediatrics.

In a paper he presented before the Academy,
Anderson described the work being conducted by
himself and his co-investigators, Dr. Andres Manning
and Dr. E. A. Johnson of the Department
of Physiology and Pharmacology.

Their work centers on developing an index for
evaluation of heart function regardless of differences
in physical characteristics between one heart and
another. Anderson believes the work has potential
for aid in initial diagnosis of heart problems, in

the long - term follow-up care of heart patients, and in determining the best time for surgery.

* * *

Dr. Joseph A. C. Wadsworth, chairman of ophthalmology, has been elected chairman of the 12-man American Board of Ophthalmology. Vice chairman last year, Wadsworth has been a member of the board for eight years. He also is chairman of the Eye Section of the Southern Medical Association.

* * *

Dr. Doyle Gentry, assistant professor of medical psychology, and chief of the psychodiagnostic laboratory for the past three years, is the new head of the Division of Medical Psychology. He succeeds Dr. Carl Eisdorfer, who has gone to the University of Washington in Seattle. Gentry came to Duke three years ago from Florida State University where he received his Ph.D. in clinical psychology.

* * *

Recent promotions at Duke include the following:

Dr. William L. Hylander has been promoted to assistant professor of anatomy. He earned his B.S. and doctorate in dentistry at the University of Illinois Medical Center, and his M.A. and Ph.D. at the University of Chicago.

Newly promoted assistant professor of psychiatry, Dr. James Loren Nash, received his M.D. degree from Duke in 1966. He completed his internship and residency at Duke Hospital and was a staff psychiatrist at General Leonard Wood Army Hospital in Missouri.

Dr. Thomas T. Thompson has been appointed assistant professor of radiology and assistant professor of community health sciences. He received an A.B. in mathematics and physics at Lenoir-Rhyne College and an M.D. at the Medical College of Virginia. He came to Duke in 1967 as a resident in diagnostic radiology and is presently acting chief of radiology service at the VA Hospital in Durham.

* * *

Fourteen Duke doctors were among those who presented papers at the annual meeting of the American College of Surgeons in San Francisco.

In addition to Dr. David C. Sabiston Jr., chairman of the Department of Surgery, Duke representatives included Drs. Andrew S. Weschlet, Samuel A. Wells Jr., Bernard Amos, Donald E. McCollum, Donald S. Bright, Rodney A. Mortenson, James R. Urbaniak, Hiroshi Eguro, Sewell H. Dixon, P. O. Hagan, H. Newland Oldham Jr., James C. A. Fuchs, and Timothy Takaro.

A film prepared by Dr. James F. Glenn, chief of the Division of Urology, was also shown.

* * *

Dr. Myron L. Wolbarsht, director of ophthalmic research, received the Alumni Award of Merit for 1972 from St. John's College in Annapolis, Md.

* * *

Dr. J. Leonard Goldner, chief of orthopaedic

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surgery, conducted a course and workshop in the management of surgery in cerebral palsied patients in Bogota, Colombia. He was invited by the Latin American Society for Orthopaedics and Traumatology, and also the Colombian Hand Society.

Goldner also attended the annual meeting of the Interurban Orthopaedic Club in Oxford, England, and was a guest of the British Orthopaedic Association in London.

News Notes from the—

UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH AFFAIRS

Dr. Morris A. Lipton, chairman of the UNC Department of Psychiatry, has been named Sarah Graham Kenan Professor of Psychiatry.

One of the highest honors conferred upon a UNC faculty member, a Kenan Professor is selected for distinguished service to the University over a period of years and for scholarly contribution to academics as a whole.

Dr. Lipton, a member of the UNC medical faculty since 1959, is currently studying the biology of mood

disorders and the metabolic fate of administered marijuana.

Besides his duties with the Department of Psychiatry, he is also director of the Biological Sciences Center of the UNC Child Development and Mental Retardation Research Institute. He has served on scores of national and state committees including the Presidential Commission on Obscenity and Pornography.

* * *

Dr. Oscar L. Sapp III has been named associate dean for continuing education at the UNC School of Medicine, effective Oct. 1, 1972, it has been announced by Dr. Christopher C. Fordham, dean of the school.

Dr. Fordham said that Dr. Sapp will be in charge of continuing education and alumni affairs for the School of Medicine and that he will continue his work in the Division of Gastroenterology in the Department of Medicine.

A professor of medicine and specialist in gastroenterology, Dr. Sapp joined the UNC faculty in 1960.

* * *

Medical seeds that were first developed and grown in North Carolina were planted Oct. 24 in Hampshire, England.

Dr. Eric Schopler told members of the National

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Don Phillips, Administrator
George K. White
Asst. Administrator

Society for Autistic Children how his program to treat severely disturbed children was developed at the University of North Carolina School of Medicine.

The program Dr. Schopler described recently won the Gold Achievement Award given by the American Psychiatric Association.

Co-founded by Dr. Schopler and Dr. Robert Reichler, the treatment program centers on a frank and equal effort between parents of autistic children and medical professionals.

One of the main purposes of this conference was to set up a parent participation program in England like the one in North Carolina.

* * *

Dr. Christopher C. Fordham III, dean of the UNC School of Medicine, has been named chairman of the deans of the southern medical schools.

Dr. Fordham was elected to the post at the fall meeting of the 32-member group.

* * *

Dr. James L. Olsen, director, Drug Product Program, UNC School of Pharmacy here, has been appointed a consultant to the National Institute of Mental Health.

In this capacity, Dr. Olsen will review and analyze various experimental approaches on preparations of narcotic antagonist drugs. He will also advise the National Institute of Mental Health on the feasibility and validity of experimental approaches in various on-going projects.

* * *

The Burroughs Wellcome Fund has announced a \$5,000 grant in support of the University of North Carolina School of Pharmacy and Duke University Physician Associate Program.

This is a recent project developed by the two schools in which selected fifth year pharmacy students take concurrent senior pharmacy courses and those not covered in the academic portion of Duke's Physician Associate program. Upon completion of their fifth year, these students are awarded the B.S. in Pharmacy degree and begin 15 months of clinical rotations.

* * *

The president of the N. C. Public Health Association said at its annual meeting the Association "is trying to make a difference in North Carolina by getting involved in more of the state's health problems."

Lydia Holley delivered the presidential address at the second general session Oct. 19.

Miss Holley is a professor of health education in the UNC School of Public Health in Chapel Hill.

* * *

Dr. Nathan A. Womack, chairman emeritus of the UNC Department of Surgery, presented a special lecture Nov. 14 at the surgery section of the 66th annual meeting of the Southern Medical Association in New Orleans. He spoke about a new theory in



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the cause of ulcers. Dr. Womack also discussed this same theme in an article "Gastrojejunostomy and Gastrojejunal Ulcer" that appeared in the November issue of *Surgery, Gynecology and Obstetrics*.

* * *

New Faculty

Richard Lee Clark, associate professor in the Department of Radiology, effective June 1, 1973, is now chief of radiology with the U. S. Public Health Service Hospital in Norfolk, Va. He holds the A.B. from Oberlin College and the M.D. from the Johns Hopkins University.

John T. Daly, assistant professor in the Department of Pathology, was formerly a visiting assistant professor in the UNC School of Medicine. From 1970-1972, he was Durham County Medical Examiner and assistant regional pathologist. A graduate of Manhattan College, he earned his M.D. at Cornell Medical College.

Mohammad Reza Habibian, assistant professor in the Department of Radiology, was a nuclear medical instructor at Duke University last year. He received his M.D. from Tehran University Medical School.

Barbara E. James, assistant professor of psychology in the Department of Psychiatry, was a post-doctoral student at the University here last year. She holds a B.A. from Winthrop College and an M.S. and Ph.D. from Florida State University.

Ernest N. Kraybill, assistant professor in the De-

partment of Pediatrics, has been assistant professor of pediatrics at George Washington University since 1969. He earned his B.S. at Eastern Mennonite College and his M.D. at the University of Pennsylvania.

Noel Andre Mazade, assistant professor of mental health program administration in the Department of Psychiatry and lecturer in the School of Social Work, received his Ph.D. this year from the University of Pittsburgh, where he was a research assistant and research director. A graduate of Wayne State University, he earned his M.S.W. at the University of Michigan and M.S. at Pittsburgh.

Richard A. Wyrick, assistant professor of psychology in the Department of Psychiatry, was awarded his Ph.D. this year from the University of Arizona, where he also received his M.A. He completed undergraduate studies at the University of Oregon.

Dennis Robert Barry, instructor in the Department of Hospital Administration and administrative director of N. C. Memorial Hospital, has served as vice president for planning and development at the Samaritan Health Service, Phoenix, Ariz., since 1970. A University of Illinois graduate, he earned his M.B.A. at the University of Chicago.

Michael B. Hresko, clinical instructor in psychiatry and staff psychiatrist in the Orange-Person-Chatham Mental Health Center, has been clinical director of the Robert Packer Hospital Community Mental Health Center, Sayre, Pa., since 1966. He received

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his B.A. from Lehigh University and his M.D. from Jefferson Medical College in Philadelphia, Pa.

* * *

County public health departments made a very poor showing in a recent study of the North Carolina's 80 local departments, according to Dr. Charles Harper, associate dean of the UNC School of Public Health.

Dr. Harper made the information public in a speech before the N. C. Public Health Association in annual session this week at Wilmington.

Health professional judges were asked to rank the 80 county health departments according to their relative effectiveness, listing those that should be among the top ten and those that should be among the bottom ten, Harper said.

More than one half, or 43, of the county departments were listed as one of the 10 least effective.

Dr. Harper pointed out that many factors contribute to low effectiveness ratings such as these. He listed some of them as sparse population in the county, low per capita income, part-time health directors, and general inability to attract and support the desired quality and quantity of health manpower.

* * *

Dr. Ake Senning, head and chairman of the Department of Surgery at the University of Zurich, Switzerland, was chosen the fourth UNC-Duke Hunter J. Sweaney Visiting Professor and Lecturer in Surgery. He was in Durham and Chapel Hill from Nov. 6-11 presenting special lectures and attending rounds and conferences.

The Sweaney Lecture was presented on Nov. 10. Dr. Senning discussed "Colonoscopy — Its Possibilities in Surgery."

News Notes from the—

BOWMAN GRAY SCHOOL OF MEDICINE WAKE FOREST UNIVERSITY

Dr. Frank C. Greiss Jr., professor of obstetrics and gynecology at the Bowman Gray School of Medicine, has been appointed chairman of the school's Department of Obstetrics and Gynecology.

He has been acting chairman of the department since March 1. Dr. Greiss succeeds Dr. Richard L. Burt, professor of obstetrics and gynecology, who resigned the chairmanship to return to full-time teaching, research, and patient care at the Bowman Gray-Baptist Hospital Medical Center.

Dr. Greiss, who joined the Bowman Gray faculty in 1960, was promoted to professor of obstetrics and gynecology in 1970. For the past 12 years he has been engaged in research on uterine circulation. It

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was for this work that he was awarded the 1968 Foundation Prize of the American Association of Obstetricians and Gynecologists.

He is chairman of the Section on Obstetrics of the Southern Medical Association and is chairman of the Committee on Obstetric Anesthesia and Analgesia of the American College of Obstetricians and Gynecologists.

He recently was elected to membership in the American Gynecological Society.

Dr. Greiss holds the A.B. and M.D. degrees from the University of Pennsylvania, where he was elected to Alpha Omega Alpha. He completed residency training in obstetrics and gynecology at Baptist Hospital.

* * *

Recent appointments to the medical school faculty include 22 new members of the full-time faculty and eight additions to the part-time faculty.

Full-time appointments went to: Dr. Lawrence C. McHenry, professor of neurology; Dr. Alexander A. Birch, assistant professor of anesthesia; Dr. Robert A. Diseker, assistant professor of community medicine; Dr. Clara Heise, assistant professor of radiology; Dr. James T. McRae, assistant professor of surgery; Dr. Thomas F. Pajak, assistant professor of community medicine; and Dr. Paul E. Benoit, associate professor in the Division of Allied Health.

Also, Dr. John W. Denham, instructor in community medicine; Thomas R. Gnau, instructor in radiology; Claire M. Kretschmann, instructor in neurology; Dr. Ronald G. LaGrange, instructor in physiology; Dr. A. Carter Lewis, research instructor in microbiology; Dr. Paul E. Parker, instructor in laboratory animal medicine; Dr. Roger E. Parker, instructor in physiology; Dr. Hugo Tettamanti, instructor in surgery; Dr. Richard J. Traystman, instructor in physiology; Dr. William D. Wagner, instructor in laboratory animal medicine; Rodney C. Williams, instructor in radiology; Richard W. Beckham, instructor in the Division of Allied Health; Gale L. Harkness, assistant instructor in the Division of Allied Health; and Pamela D. Ogburn, assistant instructor in the Division of Allied Health.

Part-time faculty appointments went to: Dr. Peggy Chou, clinical instructor in psychiatry; Dr. Robert W. Gibson, clinical instructor in psychiatry; Dr. Kenneth S. Keyes, clinical instructor in otolaryngology; Dr. Walter S. Lockhart, clinical assistant professor in neurosurgery; Dr. J. Isaac Newton, clinical instructor in obstetrics and gynecology; Dr. Thomas E. Simpson, clinical instructor in surgery; Dr. James D. Yopp, clinical instructor in medicine; and Dr. James R. Winning, lecturer in the Division of Allied Health.

* * *

Dr. Stephen G. Anderson, assistant professor of obstetrics and gynecology, spoke on "Clinical Concepts of Uterine Blood Flow Studies" Sept. 22 during

a meeting of the North Carolina Obstetrics and Gynecology Society in Hamilton, Bermuda.

* * *

Dr. Billy C. Bullock, associate professor of laboratory animal medicine, spoke on "Parasitic Problems of Clinical Importance in Nonhuman Primates" at the 23rd annual session of the American Association of Laboratory Animal Science Oct. 16-20 in St. Louis, Mo.

* * *

Dr. Robert J. Cowan, assistant professor of radiology, and Dr. C. Douglas Maynard, associate professor of radiology, taught a refresher course on "Brain Imaging in Nuclear Medicine" Oct. 5 during a meeting of the American Roentgen Ray Society in Washington, D. C. Cowan also spoke on "Dynamic Studies with the Scintillation Camera" and "Kidney Imaging and Function" during a radioisotopes course Oct. 16-17 at the Old Ridge Associated Universities in Oak Ridge, Tenn.

* * *

Dr. Eugene R. Heise, assistant professor of microbiology, spoke on "Carcinogens as Allergens: Detection of Carcinogens by Cell-Mediated Immunologic Reactions" at the First Annual Collaborative Conference of the Carcinogenesis Program of the National Cancer Institute in San Antonio, Tex., Oct. 2-4.

* * *

Dr. Hugh B. Lofland, professor of pathology, spoke on "Influence of Genetic and Nutritional Factors on Sterol Metabolism in Squirrel Monkeys" Oct. 17 at the Wistar Institute for Anatomy and Biology in Philadelphia.

* * *

Dr. C. Douglas Maynard, associate professor of radiology, lectured on "Brain Scanning," "Bone Scanning" and "Thyroid Studies" Oct. 18-20 at Walter Reed Army Medical Center.

* * *

Dr. Henry S. Miller, Jr., associate professor of medicine, and Dr. Michael L. Pollock, associate in medicine, attended a scientific congress held in conjunction with the XX Olympiade in Munich, Germany. Pollock presented a paper on "Physiological Characteristics of Champion American Track Athletes 40 to 70 Years of Age."

* * *

Dr. Inglis J. Miller, Jr., assistant professor of anatomy, spoke on "Taste Bud Innervation and Lateral Interactions" at the second annual meeting of the Society for Neuroscience Oct. 11 in Houston, Tex.

* * *

Dr. Richard T. Myers, professor and chairman of the Department of Surgery, spoke on "Non-Malignant Tumors of the Gallbladder and Bile Ducts" during a postgraduate course at a meetin

of the American College of Surgeons Oct. 2-6 in San Francisco.

* * *

Dr. R. Winston Roberts, professor of ophthalmology, was honored at a meeting of the Academy of Ophthalmology Sept. 24-27 in Dallas, Tex. He was recognized upon the completion of his 25th year as Chief of Ophthalmology at Baptist Hospital.

* * *

Dr. James F. Toole, professor and chairman of the Department of Neurology, spoke on "Transient Episodes of Cerebrovascular Ischemia—Causes and Natural History" at the 85th meeting of the American Clinical and Climatological Association Oct. 29-Nov. 1 at Ponte Vedra Beach, Fla. He also spoke on "Neurological Screening Examination" during the 27th annual medicine seminar of Samuel Merritt Hospital Sept. 21-22 in Oakland, Calif.

* * *

Dr. Michael J. Walsh, assistant professor of pharmacology, presented a paper entitled "Alkaloid Involvement in Alcoholism" during the second annual meeting of the Society of Neuroscience Oct. 8-11 in Houston, Tex.

* * *

Dr. Stephen H. Richardson, professor of microbiology is on a six-month sabbatical leave in Bangladesh, where he is continuing his studies on cholera.

News Notes from the—

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

NCRMP Funds Four Area Health Education Systems

By Ron W. Davis, Ed. D.

This month's NCRMP Newsnotes is devoted to an article by Dr. Ron Davis which originally appeared in NCRMP's publication, INNOVATION. We are reprinting it because we feel it is of general interest to physicians across the state. Dr. Davis is Coordinator, Health Education Systems Development, NCRMP Manpower Program, and Coordinator of Medical Education for the North Carolina Medical Society.

An Area Health Education System is formed when a number of educational institutions and groups and a number of health care institutions and groups join together to form an independent organization for the purpose of coordinating and improving educational opportunities for health care personnel in their area. (Areas consist of one or more of the Governor's 17 multi-county planning units.)

The national office of RMP indicates that an

AHES should provide "community - based educational programs and opportunities for the health professions" by "improving linkages among the existing training resources within communities" and "strengthening relationships between education and (health) service."

In many sections of North Carolina there exist community colleges and technical institutes whose avowed purpose is to meet the manpower training needs of their area. In these same areas, there are hospitals, nursing homes and other health-care provider groups or institutions which need help in planning and carrying out education and training programs for their own personnel. The need for a system like AHES is reflected by the fact that there is no organized means for these different groups to work together toward their common goal.

NCRMP guidelines provide that in the preparation and implementation of an Area Health Education System project proposal, at least three groups must be represented. These are local health planning agencies, local health care providers and local post-high school education institutions. The system may also include persons representing professional health societies, consumers of health care services, local political structures, and federal programs involved in health manpower training. The "independent organization" which is formed must be capable of receiving and administering funds, and must have a decision-making capacity and procedure independent of its component parts.

At the present time four Area Health Education Systems have been funded by NCRMP and are operational. Each of these is funded for approximately \$50,000.

The Albemarle Human Resources Development System, (Elizabeth City, N. C. 27909, Howard B. Campbell, Chairman, Board of Directors; 919-335-5429) covers the ten counties in the multi-county planning unit "Region R."

In its development this AHES utilized some of the organizational structure which had been created by the Albemarle Regional Planning and Development Council. In cooperation with the local CHP "b" agency, conversation was held with representatives of the NCRMP Continuing Education Project located at East Carolina University to find ways in which this group might help in the endeavor. In addition to providing staff consultation, the ECU-based project supported an outside consultant who helped the Albemarle Sound area with the preparation of its AHES project proposal.

The seven objectives of this organization are grouped into four related sets. The first set is concerned with expansion of work experiences and insuring health manpower retention in the community. The second deals with the recruitment and training of new health professionals. The third is especially aimed at fostering grassroots participation in health

education curricula and in facilitating community health activities. The fourth deals with the matching of manpower resources with community needs.

In the development of the Albemarle AHES, a five-phase planning methodology is proposed: (1) identification of health education needs, (2) development of objectives and goals of the systems, (3) analysis of alternate programs, (4) detailed program planning and evaluation design, and (5) implementation of the program.

The Region L Area Health Education System, (Region L Council of Governments, P.O. Box 1827, Rocky Mount, N. C. 27801, Miss Elizabeth Tisdale, Project Director, 919-446-0411) covers the counties of Wilson, Halifax, Edgecombe, Northampton, and Nash.

The primary thrust of the Region L AHES program is toward the upgrading of nursing services in this area. One of the technical institutes is currently developing an associate degree nurse training program which should be operational in the near future. The AHES network will be used to make sure that potential trainees throughout the area are made aware of this educational opportunity. In cooperation with the NCRMP Equivalency and Proficiency Test Development Program, Region L will serve as a trial area for the use of tests developed by the Educational Testing Service. Tests will primarily be used with LPNs in the area who have the capability and interest to move further up the career ladder. The AHES Program also will assess the need for and help develop education and training opportunities for all health professionals in the area.

The Foothills Health Education Commission, (c/o Cleveland Memorial Hospital, 201 Grover Street, Shelby, N. C. 28150, Mr. George Newman, Project Director, 704-482-5371) covers Cleveland, Gaston, and Lincoln counties, an area congruent with the local Health Planning Council.

The proposed program is built on the results of two surveys. The first is a health manpower survey which used the standard form being used by CHP "b" agencies throughout the state. The second was a survey of continuing education needs of health personnel in selected hospitals and current in-service activities available to health professionals in this area.

The commission has five major objectives: (1) to develop and implement a manageable network of community based in-service/continuing education activities for area-wide health professionals; (2) to increase the appropriateness and timeliness of continuing education/in-service activity by systematically determining specific needs and resources; (3) to develop a planning system which will support the development and implementation of a system of county and area-wide consulting groups to the Foothills Commission in order to improve communication relative to the availability of health-related educa-

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Hypersensitivity to any of the tetracyclines
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**

Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)

Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.

Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)

All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in tibula growth rate occurred in premature given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.

Tetracyclines are present in milk of lactating women taking tetracyclines.

To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The antianabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.

Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.

PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.

In venereal diseases, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.

Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.

In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).

Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.

Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.

ADVERSE REACTIONS: **Gastrointestinal** (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis inflammatory lesions (with monilial overgrowth) in the anogenital region.

Skin: maculopapular and erythematous rashes, exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).

Renal toxicity: rise in BUN apparently dose related (See **WARNINGS**).

Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.

Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.

Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.

Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.

USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea. In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.

For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.

Eaton Agent pneumonia: 900 mg daily for six days.

Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.

Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.

Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.

In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.

In streptococcal infections, a therapeutic dose should be given for at least 10 days.

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tional activities; (4) to implement, for commission-funded educational activities, a workable planning cycle which is consistent with specifically identified educational needs of the area's health professionals; and (5) to provide for increased support to the design, conduct and evaluation of area-wide in-service/continuing education programs.

The Health Education Commission of Western North Carolina, (c/o The New Health Building, Asheville, N. C. 28807, John McLeod, M.D. and Mr. L. D. Hyde, Co-Chairmen, Board of Directors, 704-252-5888), covers the eleven southwestern counties of North Carolina which also form the CHP 'b' agency known as Mountain Ramparts Health Planning, Inc.

Through talking with doctors, nurses, hospital administrators, health educators, technical institute presidents, college deans, laboratory technicians, county commissioners, mayors and others, the members of the board of the commission determined that the best approach to the continuing education needs of allied health personnel, nurses and physicians in the area was through a series of monthly interdisciplinary workshops and seminars. These are to be held at three different locations throughout the area, Oteen, Waynesville, and Bryson City, so that no participant will travel more than 40 miles. Project personnel also plan on providing individual continu-

ing education to health care personnel in the area as specific needs are identified.

Because it has already been involved in conducting these kinds of activities, primary responsibility for organization and operation of the workshops has been contracted to the School of Nursing at Western Carolina University in Cullowhee, which also will serve as the fiscal agent for the project grant.

A unique aspect of the Western North Carolina program is the involvement of the Veteran's Administration through its hospital at Oteen, which is providing funds for staff personnel to the Commission. This staff will have responsibility for reviewing the broader health education needs of the area, such as those involved with the basic training of physicians, nurses and allied health personnel. They will work in close cooperation with and supplement the efforts of the NCRMP-supported program.

AMERICAN ACADEMY OF FAMILY PHYSICIANS

The American Academy of Family Physicians' recent annual survey of family practice residency programs shows that 1,015 young graduates are training to be family physicians.

This figure almost doubles the number enrolled

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in family practice residency programs a year ago. It is three times more than were in training in 1970.

The survey also indicates that 81 percent of the available first-year family practice residency slots are filled, bettering by 10 percent the figure in 1971. This percentage of filled first-year slots is higher than that for most other medical specialties.

Three years ago, there were 20 approved programs. There now are 107. Currently there are 34 departments and 31 divisions of family practice in the nation's 105 medical schools.

NATIONAL INSTITUTE OF MENTAL HEALTH

Grant awards totalling close to \$10 million for staffing children's mental health services have been announced by Dr. Bertram S. Brown, director, National Institute of Mental Health, of HEW's Health

Services and Mental Health Administration.

In making the announcement, Dr. Brown said the awards launch a special program to stimulate the development of community-based mental health care for children. A total of 60 facilities in 35 states and the District of Columbia received the grants to set up innovative services and collaborative arrangements.

Two of the awards will be received in North Carolina.

The public schools of Raleigh will receive \$107,398 for a program of high-level cooperation and collaboration between the school system, the mental health center, and the state hospital, with emphasis on preschool age children and first graders.

The Orange - Person - Chatham Mental Health Clinic, at Chapel Hill, will receive \$165,083 to provide consultation to existing day care centers and to encourage the development of new centers.

Month in Washington

Only a handful of some 2,600 health related bills introduced into the 92nd Congress have become public law. The most talked about pieces of health legislation over the past two years—national health insurance and health maintenance organizations—have been set aside for deliberation by next year's 93rd Congress.

After long years of debate by two sessions of the Congress, the Social Security catch-all legislation (H. R. 1) with its significant amendments to Medicare and Medicaid gained passage and has been signed into law by the President. Three of its measures are of major importance to physicians.

First is the Professional Standards Review Organization (PSRO) proposal of Utah's Senator Wallace Bennett, which is designed to improve the quality and utilization review of health care on a national basis. This provision of the law stresses that over the next two years peer review will be concentrated in institutional settings rather than in physicians' offices, such review to be undertaken by physician organizations only.

Second, the new law stipulates that Medicare and Medicaid patients may receive care from health maintenance organizations (HMO's), but that federal reimbursement for such care will be no greater than for similar services rendered by non-HMO providers.

Third, the new law grants certain chiropractic

benefits to Medicare and Medicaid patients. A passed by the Senate, chiropractic benefits were limited only to manipulation of the spine. In joint conference, House members further modified the Senate provision to require that chiropractic benefits be covered only after an x-ray revealed subluxation. The language of the law is not specific, but apparently the x-ray cost will not be paid for by Medicare nor may the x-ray be interpreted by a chiropractor. However, this point will not be clarified until the regulations are written. The provision also requires that chiropractors, in order to be reimbursed, must meet minimum standards established by the Secretary, Department of Health, Education and Welfare.

Peer Review

Under the peer review provision of the new law, local medical societies will have the opportunity to establish peer review mechanisms, operating independently, to review the quality of care hospitals and nursing homes provide to Medicare and Medicaid patients.

Task of the PSRO is to "assure proper utilization of care and services . . . utilizing a formal professional mechanism representing the broadest possible cross-section of practicing physicians in an area."

The HEW Department could reach agreement only "with a qualified organization which represents a

substantial proportion of the physicians in the geographical area. . . ." If this isn't achieved by 1976, HEW could turn to some other group to establish the PSRO.

A PSRO would be required to review only institutional care and services through 1975 unless it chooses—with approval of the government—to broaden the scope to include private paractice.

During the pre-1976 period, 10 percent or more of the practicing physicians in an area could demand a poll of all practicing physicians to determine whether the organization negotiating to set up a PSRO substantially represents the physicians of the area. A more than 50 percent "no" vote would break-off the negotiations.

From now until the end of next year, the HEW Department is ordered to establish PSRO areas around the country (usually 300 or more physicians). In some cases it is believed that entire smaller states will be designated as PSRO areas.

In carrying out its responsibilities the PSRO would be required to regularly review provider and practitioner profiles of care and service (that is, the patterns of services delivered to Medicare and Medicaid beneficiaries by individual health care practitioners and institutions) and other data to evaluate the necessity, quality, and appropriateness of services for which payment may be made under the Medicare and Medicaid programs.

The PSRO would be expected to analyze the pattern of services rendered or ordered by individual practitioners and providers and to concentrate its attention on situations in which unnecessary, sub-standard, or inappropriate services seem most likely to exist or occur.

A PSRO would have authority to approve the medical necessity of all elective hospital admissions in advance—solely for the purpose of determining whether Medicare and Medicaid will pay for the care. The PSRO would also be required to acknowledge and accept, in whole or in part, an individual hospital's own review of admissions and need for continued care, on a hospital-by-hospital basis, where it has determined that a hospital's "in-house" review is effective. It is expected that where such "in-house" review is effective this authority would be exercised by the PSRO. Similarly, a PSRO would be required to acknowledge and accept for its purposes, review activities of other medical facilities and organizations, including those internal review activities of comprehensive prepaid group practice programs such as the Kaiser Health Plans and the Health Insurance Plan (H.I.P.) in New York to the extent such review activities are effective.

The PSRO would (after reasonable notice) recommend to HEW appropriate action against persons responsible for gross or continued overuse of services, for use of services in an unnecessarily costly

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Assistant Medical Director

OWEN W. BRODIE, M. D.
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M. M. VITOLS, M. D.
Associate in Psychiatry

NEUROLOGY

GERALD W. ATKINSON, M. D.
Associate in Neurology

CHILD PSYCHIATRY

GILBERT SILVERMAN, M. D.
Associate in Child Psychiatry

ADMINISTRATION

H. R. WOODALL
Administrator

manner, or for inadequate quality of services and would act to the extent of its authority and influence to correct improper activities.

Where a review organization finds that voluntary and educational efforts fail to correct or remedy an improper situation, it would transmit its recommendations concerning sanctions through a state-wide council to the secretary of HEW.

The secretary could terminate or suspend Medicare and Medicaid payments for the services of the practitioner or provider involved, or assess an amount reasonably related to the excessive costs to the programs deriving from the acts or conduct involved.

A PSRO would have the responsibility of determining—for purposes of eligibility for Medicare and Medicaid reimbursement—whether care and services provided were: first, medically necessary, and second, provided in accordance with professional standards. Additionally, the PSRO where medically appropriate, would encourage the attending physician to utilize less costly alternative sites and modes of treatment.

The PSRO would not be involved with questions concerning the reasonableness of charges or costs or methods of payment nor would it be concerned with internal questions relating to matters of managerial efficiency in hospitals or nursing homes except to the extent that such questions substantially affect patterns of utilization. The PSRO's responsibilities are confined to evaluating the appropriateness of medical determinations so that Medicare and Medicaid payments will be made only for medically necessary services which are provided in accordance with professional standards of care.

The local PSRO would be primarily responsible for review of all Medicare and Medicaid services rendered or ordered by physicians in its area. The purpose of the provision is to establish a unified review mechanism for all health care services under the aegis of the principal element in the health care equation, the physician.

HMO Option

The legislation contains the Administration's request for allowing Medicare - Medicaid beneficiaries to enroll in HMO's, but limits the choice to existing pre-paid group practicing plans by providing that incentive reimbursement would be available only to

HMO's with a minimum membership of 25,000 and which have been in operation for at least two years. Instead of the Administration's plan for paying such HMO's 95 percent of the combined part A and B costs of Medicare patients in an area, the bill sets out a formula under which HMO's would receive one-half of the savings if care has been rendered for less than the Medicare average in an area (the so-called incentive reimbursement), but would have to absorb the entire loss if HMO treatment for Medicare beneficiaries runs higher than regular Medicare costs in the area.

The Joint Conference rejected a provision that would have made the federal government share in the losses of HMO care to Medicare patients, as well as a provision that would have established a bonus arrangement for states providing HMO care for Medicaid beneficiaries.

Chiropractic

Inclusion of chiropractic benefits for the first time in a federal program was a set back to the medical profession, the Administration, and numerous other anti-chiropractic forces. However, the modification of the chiropractic benefit language in conference may make it practically unworkable. As passed by the Senate, chiropractic benefits were limited to manual manipulation of the spine. In conference, this was modified to require that benefits would be covered only after an x-ray revealed subluxation. Apparently the x-ray cost will not be covered, nor can it be interpreted by a chiropractor, but these points will not be clarified until regulations are written.

Senator Edward Kennedy attempted by an amendment from the floor to strike the chiropractic provision, but it was soundly defeated by a vote of 66 to 6. Subsequently, the Massachusetts senator admonished the AMA for not supporting his amendment.

However laudable his effort, Senator Kennedy—an experienced parliamentarian—should have recognized that his attempt to strike the chiropractic provision had no chance of success. His amendment to H.R. 1 was unprinted; he introduced it from the Senate floor; and he proceeded without the cooperation of the bill's manager. That his approach was ill-advised from the standpoint of effective parliamentary procedure is evidenced by the amendment's lopsided defeat.

From the delicate state of children, and the great sensibility of their organs, a vomiting or looseness may be induced by anything that irritates the nerves of the stomach or intestines. Hence, these disorders are much more common in childhood than in the more advanced periods of life. They are seldom however dangerous, and ought never to be considered as diseases, unless when they are violent, or continue so long as to exhaust the strength of the patient. — William Buchan: *Domestic Medicine*, or a *Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines*, etc., Richard Folwell, 1799, p. 373.

Book Review

Medicine in a Changing Society. Edited by Lawrence Corey, Steven E. Saltman, and Michael F. Epstein. 228 pages. Price, \$6.50. St. Louis, Missouri, 1972.

Presented as a "pertinent commentary on the problems—and their potential solutions—facing America's health system," this book presents a reviewer with a dilemma. The decision to be made is whether to review the preface, which is a capsule commentary on changes in medical education at the University of Michigan, to review the body of the book itself, or both. This reviewer chooses to give major emphasis to the book as a whole, while making a passing comment on the preface.

The editors (former University of Michigan students, now interns) point out in their preface that "in today's society it is not possible to be an effective physician without understanding the social issues and moral, ethical and organizational problems that derive from the setting in which medicine is practiced." No one could agree more than this reviewer. However, after attempting to present such material to medical students for several years with a response which might be called euphemistically "less than enthusiastic," one wonders why there are such differences in groups of medical students. Judging by the comments of the editors, medical students in Michigan are consumed by an overwhelming desire to delve into the issues discussed in this book. Judging by my own experience, nothing could be farther from the desires of most medical students in North Carolina. So much for the preface.

The editors are to be congratulated on collecting a group of authors whose works presented here are of uniformly high calibre. Those who are scientifically trained present their material in well organized fashion with adequate documentation. In addition,

the vitality of their presentations has not been stifled or excised as is customary in most American medical journals. The non-scientist authors also present their material in literate fashion albeit with considerable bias as in the cases of Messrs. Reuther and Kennedy.

The first portion of the book is devoted to establishing the need for change in the American system of delivery of medical care. Outstanding among its seven chapters are one by Ashley Weeks on "The Pathology of Poverty," and one by Avedis Donabedian on "The Quality of Care." Since many physicians neither perceive nor accept the need for community health planning, the chapter devoted to this subject by Darwin Palmiere is also of great significance.

The second, and larger, portion of the book consists of chapters describing various facets of change. Some of these changes have already occurred, others are in progress, still others are being planned, and the remainder are still in the discussion phases. The topics range from an excellent dispassionate assessment of Medicare and Medicaid by Agnes Brewster to discussions of national health insurance by Edward Kennedy, Wilbur Cohen, and Walter Reuther.

This book is a paperback, a fact which immediately raises a question about whether its price is justified. After reading and appreciating the consistently high quality of its presentations, however, this concern is dissipated rapidly. The book is to be recommended highly to all health professionals, students of the health professions, community health planners, and interested citizens. It does indeed achieve the purpose stated by its editors.

DONALD M. HAYES, M.D.

As the principal intention of the cure of a looseness is to eventuate the offending matter, it is customary to give the patient a gentle vomit of ipecacuanha, and afterwards to exhibit small and frequent doses of rhubarb; interposing absorbent medicines, to mitigate the acrimony of the humours. The best purge in this case is *magnefia alba*. It is absorbent and laxative, and operates without exciting gripes.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 374.

In Memoriam

Philip Lafayette Dixon, M.D.

Suddenly and unexpectedly, death came to our fellow physician, Philip Lafayette Dixon, at the age of 53, on July 6, 1972.

Phil spent his early years at his home in Walstonburg, Greene County. He attended Mars Hill College and Wake Forest College, and in 1938 entered the medical school at Wake Forest. He transferred to the University of Maryland Medical School and received his M.D. there in 1942.

After a year's internship at James Walker Memorial Hospital in Wilmington, N. C., he went on active duty with the U. S. Navy in 1943, and served more than two years in the Pacific theatre.

Upon release from the Navy in 1946, he began several years of resident training in surgery, divided between Albany Medical College Hospital, Albany, N. Y., and Maryland General Hospital, Baltimore. He then returned to the area he really loved—Eastern North Carolina—practicing surgery and general medicine in Jacksonville from 1950 to 1961. At this time, feeling the need of some relief from the pressures of a very busy practice, he began a residency in radiology at North Carolina Memorial Hospital in Chapel Hill, under Dr. Ernest Wood, who was chairman of the department at that time.

Dr. Dixon is survived by his wife, the former Marguerite Johnson, of Hookerton, Green County, and four children.

He was a member of the American Medical Association, the North Carolina Medical Society, the Nash-Edgecombe Medical Society, the American College of Radiology, the North Carolina Chapter of the American College of Radiology, and the American Roentgen Ray Society.

Phil's friends and colleagues deeply regret his untimely death. His professional skills, dedication to improvement of facilities of the Department of Radiology at Nash General Hospital, and his expertise on the golf course will be sorely missed by all.

EDGECOMBE COUNTY MEDICAL SOCIETY

Marvin Lee Stone, M.D.

Dr. Marvin Lee Stone died at his home in Rocky Mount May 22, 1972. He was born in Vance County near Kittrell in 1898. He graduated from the two-year School of Medicine at the University of North Carolina in 1928 and from the University of Pennsylvania School of Medicine in 1925. In 1928

he came to Rocky Mount, where he became associated with the late Dr. James Ambler Speight in the practice of general medicine.

From time to time these two were joined by other men, and in 1937 began an association that gradually expanded until it led to the establishment of Memorial Hospital in 1951.

Dr. Stone was a leader in his profession. He so loved medicine that early in his career he surrendered himself so completely that the iron yoke of duty did not chafe.

His rewards were to see his patients get well. And there are many thousand in the community who have called his name "blessed."

WHEREAS, this gifted and outstanding member of the Society was taken from our midst at the untimely age of 74, and

WHEREAS, we, the members of the Edgecombe-Nash Medical Society do look with regret on the death of one of our loved and respected members; therefore, be it

Resolved that this obituary be spread upon the minutes of this Society, and that a copy be sent to his bereaved widow and family.

EDGECOMBE-NASH MEDICAL SOCIETY

Mike Lee, Jr., M.D.

Dr. Mike Lee, Jr., died suddenly of a heart attack at his vacation home on Atlantic Beach, Sunday morning, Aug. 27, 1972. Born Sept. 8, 1902, he was almost 70 years of age at his death.

Dr. Lee was the son of the late May Rouse and Mike Lee, Sr. of Kinston. His family had been respected citizens of Lenoir County for many years, and many of his relatives reside in the Moss Hill section of the county. Dr. Lee had two brothers, one of whom was a physician in New Jersey until his death at the age of 30. The other is a former dean and present professor in the School of Law at Wake Forest University. Two sisters survive: Mrs. Steve Wing of Marietta, Ga., and Mrs. W. D. Spence of Southern Pines. Both are teachers.

Dr. Lee received his primary education in the Kinston public schools. After graduating from Wake Forest College, he received his M.D. degree from Tulane University in 1926. After serving an internship at Watts Hospital in Durham, he returned to Kinston where he commenced the practice of medi-

cine, which he continued until his death. He was on the staff of Parrott Memorial Hospital.

Beginning in 1933, he served for about 25 years as medical director at Caswell Center. For a number of years he was also acting superintendent of that institution. This was in addition to his private practice.

Dr. Lee was married to the former Felsie Tucker of Durham on June 23, 1928. She was then a teacher in the Kinston public schools and later served for many years on the Kinston school board. Mrs. Lee died of cancer in 1957. They had one son, Mike Lee III, and a grandson, Mike Lee IV.

WHEREAS, the citizens of this area, the patients who were under his care during these many years, and his friends and associates in the Lenoir-Green-Jones Medical Society are saddened by the death of Dr. Mike Lee, and

WHEREAS, his years of service have contributed much to this community, therefore be it

Resolved, that this brief summary be made a part of our minutes as an expression of our appreciation of his having lived and worked among us and of our sorrow and sense of loss at his passing.

LENOIR-GREENE/JONES MEDICAL SOCIETY

Samuel Floyd Scott, M.D.

Samuel Floyd Scott was born in Hawsfield, on June 9, 1894, the seventh of 14 children of Robert W. (Farmer Bob) Scott and Elizabeth Hughes Scott. He received his bachelor degree from the University of North Carolina at Chapel Hill in 1915, and attended its two-year medical school. He received his Doctor of Medicine degree from the University of Pennsylvania in 1918.

After a Philadelphia internship he began his rural practice at Union Ridge, in northern Alamance County, in April, 1919.

"Doctor Floyd's" enthusiasm and zeal in his pro-

fessional work was the envy of many, but shared by few. During a flu epidemic he and his driver once went for 11 days without going to bed. In the early 1950s he accomplished the feat of delivering 365 children in one year, mostly in their homes. He participated in the transition of one era to another: from a buggy with a lantern for a heater, to his favorite vehicle, a four-wheel-drive station wagon with automatic transmission and a two-way radio; from muddy pot holes and rain-swelled creek fords for roads, to modern, paved farm-to-market roads.

He was active in many civic and professional affairs, but was never publicly outspoken, stating that he preferred to leave that leadership to his younger brothers, the late Governor and Senator W. Kerr Scott and State Senator Ralph Scott, and to his nephew, Governor Robert Scott. His favorite avocation was farming, and he introduced many agricultural innovations to his community during the lean depression years.

He had begun his fifty-fourth year of active practice. After seeing 31 patients in his office on May 9, 1972, he sustained a cerebrovascular accident while walking home to dinner. His life was claimed on May 15, leaving among his survivors his wife of 50 years, Frances Somers Scott, and his children, Peter S. Scott, M.D., Ludwig G. Scott, D.D.S., Mrs. Ora Lee Scott Walker, and Samuel E. Scott, M.D.

The Alamance County Medical Society has lost a valuable friend and pioneer physician, who will be missed by his many patients and friends. Be it

Resolved, that the Alamance Caswell Medical Society extend its deepest sympathy to Dr. Floyd Scott's widow, Mrs. Frances Scott, and to his family; and that a copy of the resolution be placed in the minutes of the society, a copy sent to his widow, and a copy sent to the State Medical Society.

ALAMANCE CASWELL MEDICAL SOCIETY

The eruptions of children are chiefly owing to improper food and neglect of cleanliness. If a child be stuffed at all hours, with food that its stomach is not able to digest, such food, not being properly assimilated, instead of nourishing the body, fills it with gross humours. These must either break out in form of eruptions upon the skin, or remain in the body, and occasion fevers and other internal disorders. Neglect of cleanliness is a very general cause of eruptive disorders. The children of the poor, and of all who despise cleanliness, are almost constantly found to swarm with vermin, and are generally covered with a scab, itch, and other eruptions.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Richard Folwell, 1799, p. 377.

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES
AND SELECTED CITIES OF RESIDENCE,
WITH RATES PER 1,000 DELIVERIES* - NORTH CAROLINA,
SEPTEMBER 1972 AND MOST RECENT 12-MONTH TOTALS

.....WHITE.....									NONWHITE.....									
COUNTY	PERINATAL DEATHS		TOTAL DELVY	PERI-NATAL RATE PER 1,000 DELVY	PERINATAL DEATHS		TOTAL DELVY	PERI-NATAL RATE PER 1,000 DELVY	COUNTY	PERINATAL DEATHS		TOTAL DELVY	PERI-NATAL RATE PER 1,000 DELVY	PERINATAL DEATHS		TOTAL DELVY	PERI-NATAL RATE PER 1,000 DELVY	
	SEP 1972	OCT 1971-SEP 1972	SEP 1972	OCT 1971-SEP 1972	SEP 1972	OCT 1971-SEP 1972	SEP 1972	OCT 1971-SEP 1972		SEP 1972	OCT 1971-SEP 1972	SEP 1972	OCT 1971-SEP 1972	SEP 1972	OCT 1971-SEP 1972	SEP 1972	OCT 1971-SEP 1972	
	1972	1971-1972	1972	1971-1972	1972	1971-1972	1972	1971-1972		1972	1971-1972	1972	1971-1972	1972	1971-1972	1972	1971-1972	1972
NORTH CAROLINA	115	1719	63758	27.0	106	1170	28165	41.5										
ALAMANCE	1	33	1212	27.2	1	15	409	36.7	JOHNSTON	5	28	759	36.9		12	302	39.7	
ALEXANDER	2	12	354	33.9		2	43	-	JONES		1	68	-		1	73	-	
ALLEGHANY		6	124	48.4			6	-	LEE		12	399	30.1		11	179	64.7	
ANSON		5	186	26.9		12	295	40.7	LENJIR	1	16	547	29.3	1	11	454	24.2	
ASHE		14	292	47.9			6	-	LINCOLN	5	15	517	29.0		3	105	-	
AVERY		9	211	42.7			2	-	MCDOWELL	1	17	527	32.3		1	34	-	
BEAUFORT		14	380	36.8		2	13	256	50.8	MACON		4	221	-		10	-	
BERTIE		2	197	-		1	8	238	33.6	MADISON		11	232	47.4			-	
BLADEN		5	255	19.6		1	14	210	66.7	MARTIN		9	196	45.9	2	19	266	71.4
BRUNSWICK	1	4	387	-		1	7	153	45.8	MECKLENBURG	7	87	4079	21.4	2	73	2273	32.1
BUNCOMBE		4	69	1895	36.4	1	14	261	53.6	MITCHELL		3	181	-		1	-	
BURKE	3	26	1075	25.9			6	82	-	MONTGOMERY		5	247	20.2	1	7	129	54.3
CABARRUS	2	21	944	22.2		13	289	45.0	MOORE	2	14	445	31.5	1	13	224	58.0	
CALDWELL	2	33	999	33.0		3	77	-	NASH	1	12	552	21.7	4	16	513	31.2	
CAMDEN		1	52	-			39	-	NEW HANOVER	1	25	1155	21.6	2	14	440	31.8	
CARTERET	2	11	509	22.0		1	89	-	NORTHAMPTON		3	98	-	2	17	299	56.9	
CASWELL		9	147	61.2		9	158	57.0	ONSLOW	2	62	2185	28.4		13	438	29.7	
CATAWBA	1	50	1472	34.0	1	9	243	37.0	ORANGE		21	683	30.7	2	18	220	81.8	
CHATHAM	1	12	304	39.5		3	147	-	PAMLICO		2	91	-		3	47	-	
CHEROKEE		6	251	23.9			13	-	PASQUOTANK		5	286	17.5	1	5	150	33.3	
CHOWAN		1	81	-		2	82	-	PENDER		3	163	-		4	162	-	
CLAY		4	97	-			1	-	PERQUIMANS			53	-	1	1	53	-	
CLEVELAND	2	29	928	31.3	2	26	398	65.3	PERSON	1	6	278	21.6	1	6	215	27.9	
COLUMBUS	1	26	507	51.3	2	20	363	55.1	PITT	2	20	624	32.1	6	36	631	57.1	
Craven	2	27	1154	23.4		13	411	31.6	POLK		3	142	-	1	1	26	-	
CUMBERLAND		4	95	3568	26.6	7	54	1563	34.5	RANDOLPH		25	1159	21.6		3	128	-
CURRITUCK		4	79	-			36	-	RICHMOND	1	13	477	27.3		10	263	38.0	
DARE	1	3	196	-			11	-	ROBEESON	1	12	604	19.9	6	51	1681	30.3	
DAVIDSON	2	37	1423	26.0	3	13	242	53.7	ROCKINGHAM	4	25	986	25.4	2	22	364	69.4	
DAVIE		10	255	39.2		4	57	-	ROWAN	3	23	1088	21.1		13	322	40.4	
DJPLIN	1	9	355	25.4		11	290	37.9	RUTHERFORD	2	18	648	27.8	1	7	173	40.5	
DURHAM		28	1259	22.2	5	39	883	44.2	SAMPSON		10	400	25.0	3	9	333	27.0	
EDGECOMBE		7	382	18.3	2	20	498	40.2	SCOTLAND	2	14	299	46.8	1	14	331	42.3	
FORSYTH	6	47	2445	19.2	6	50	1152	43.4	STANLY		14	596	23.5	6	136	44.1		
FRANKLIN		3	164	-		9	232	38.8	STOKES		14	368	38.0	2	59	-	-	
GASTON	4	46	2502	18.4	2	24	504	47.6	SURRY	3	22	883	24.9		4	58	-	
GATES		3	46	-		6	88	-	SWAIN		3	194	-			58	-	
GRAHAM		2	94	-			6	-	TRANSYLVANIA		6	265	22.6		1	15	-	
GRANVILLE	2	13	219	59.4		6	273	22.0	TYRRELL		1	18	-		2	27	-	
GREENE		6	81	-		4	133	-	UNION	1	22	770	28.6	1	20	332	60.2	
GUILFORD	3	76	3244	23.4	6	68	1504	45.2	VANCE		11	352	31.3	4	21	348	60.3	
HALIFAX	1	20	388	51.5	4	31	620	50.0	WAKE	6	74	2630	28.1	6	37	1075	34.4	
HARNETT		15	631	23.8	1	20	327	61.2	WARREN			60	-	1	9	162	55.6	
HAYWOOD	3	23	620	37.1			11	-	WASHINGTON		2	111	-		10	121	82.6	
HENDERSON	3	21	675	31.1		2	36	-	WATAUGA		10	347	28.8		1	5	-	
HERTFORD	2	5	119	42.0		13	271	48.0	WAYNE	2	36	1140	31.6	2	27	606	44.6	
Hoke		1	198	-	1	8	244	32.8	WILKES	1	21	845	24.9	1	1	50	-	
HYDE		3	40	-	1	6	56	-	WILSON	2	9	517	17.4	1	21	541	38.8	
IREDELL	3	21	882	23.8	1	14	340	41.2	YADKIN		8	366	21.9		2	27	-	
JACKSON		10	277	36.1			64	-	YANCEY		5	206	24.3			3	-	
CITIES									CITY TOTALS ARE ALSO INCLUDED IN COUNTY TOTALS									
ALBEMARLE		1	136	-		2	46	-	LENJIR	2	10	195	51.3		1	39	-	
ASHEBORO		1	203	-			32	-	LEXINGTON	1	6	241	24.9	1	4	78	-	
ASHEVILLE	17	591	28.8	1	14	227	61.7		LUMBERTON		3	181	-		7	195	35.9	
BURLINGTON	16	459	34.9		3	149	-		MORRIS		3	122	-	1	8	105	76.2	
CHAPEL HILL		3	225	-		2	60	-	MORGANTON	1	6	128	46.9		1	22	-	
CHARLOTTE	2	57	2439	23.4	2	67	1979	33.9	NEW BERN	1	2	151	-		5	161	31.1	
CONCORD		6	166	36.1		7	113	61.9	RALEIGH	2	30	1189	25.2	5	26	581	44.8	
DURHAM	14	757	18.5	4	33	783	42.1		REIDSVILLE		4	138	-		3	85	-	
EDEN		5	191	26.2	1	5	53	-	ROANOKE RAPIDS	1	11	175	62.9		3	35	-	
ELIZABETH CITY		2	126	-		3	75	-	ROCKY MOUNT E.		2	87	-	1	7	150	46.7	
FAYETTEVILLE		24	915	26.2	4	34	579	58.7	ROCKY MOUNT N.		4	217	-		5	115	43.5	
GASTONIA	1	23	678	29.5	1	13	253	51.4	ROCKY MOUNT C.		6	304	19.7	1	12	265	45.3	
GOLOSBORO		8	285	28.0	1	15	250	60.0	SALISBURY	1	5	156	32.1		7	152	46.1	
GREENSBORO	28	1551	18.1	6	43	933	46.1		SANFORD		4	139	-		5	79	-	
GREENVILLE		6	247	24.3	1	8	186	43.0	SHELBY		4	152	-		5	107	46.7	
HENDERSON		7	153	45.8	1	5	133	37.6	STATESVILLE		3	186	-		5	158	31.6	
HICKORY	1	11	289	38.1	1	5	113	44.2	THOMASVILLE		3	184	-		1	8	95	-
HIGH POINT	2	23	717	32.1		20	421	47.5	WILKINGTON		12	499	24.0	2	11	379	29.0	
JACKSONVILLE	1	19	388	49.0		2	89	-	WILSON	2	3	271	-		7	247	28.3	
KINSTON	1	8	242	33.1	1	6	241	24.9	WINSTON SALEM	2	22	1092	29.1	6	50	1092	45.0	

CITIES

CITY TOTALS ARE ALSO INCLUDED IN COUNTY TOTALS

ALBEMARLE	1	136			2	46			LENJIR	2	10	195	51.3		1	39	
ASHEBORO	1	203				32			LEXINGTON	1	6	241	24.9		1	4	78
ASHEVILLE	17	591	28.8	1	14	227	61.7		LUMBERTON		3	181			7	195	35.9
BURLINGTON	16	459	34.9		3	149			MONROE		3	122		1	8	105	76.2
CHAPEL HILL	3	225			2	60			MORGANTON	1	6	123	46.9		1	22	
CHARLOTTE	2	57	2439	23.4	2	67	1979	33.9	NEW BERN	1	2	151			5	161	31.1
CONCORD		6	166	36.1		7	113	61.9	RALEIGH	2	30	1189	25.2	5	26	581	44.8
DURHAM		14	757	18.5	4	33	783	42.1	REIDSVILLE		4	138			3	85	
EDEN		5	191	26.2	1	5	53		ROANOKE RAPIDS	1	11	175	62.9		3	35	
ELIZABETH CITY		2	126			3	75		ROCKY MOUNT E.		2	87		1	7	150	46.7
FAYETTEVILLE		24	915	26.2	4	34	579	58.7	ROCKY MOUNT N.		4	217			5	115	43.5
GASTONIA	1	20	678	29.5	1	13	253	51.4	ROCKY MOUNT C.		6	304	19.7	1	12	265	45.3
GDLOSBD3		8	285	28.0	1	15	250	60.0	SALESBURY	1	5	156	32.1		7	152	46.1
GREENSBORO	28	1551	18.1	6	43	933	46.1		SANFORD		4	139			5	79	
GREENVILLE		6	247	24.3	1	8	186	43.0	SHELBY		4	152			5	107	46.7
HENDERSON		7	153	45.8	1	5	133	37.6	STATESVILLE		3	186			5	158	31.6
HICKORY	1	11	289	38.1	1	5	113	44.2	THOMASVILLE		3	184		1	8	95	
HIGH POINT	2	23	717	32.1		20	421	47.5	WILKINGTON		12	499	24.0	2	11	379	29.0
JACKSONVILLE	1	19	388	49.0		2	89		WILSON	2	3	271			7	247	28.3
KINSTON	1	8	242	33.1	1	6	241	24.9	WINSTON SALEM	2	22	1092	29.1	6	50	1092	45.8

PERINATAL DEATHS = STILLBIRTHS OF 20 WEEKS GESTATION OR MORE + NEONATAL DEATHS UNDER 28 DAYS OF AGE
TOTAL DELIVERIES = STILLBIRTHS OF 20 WEEKS GESTATION OR MORE + TOTAL LIVE BIRTHS
*PERINATAL DEATH RATE = PERINATAL DEATHS DIVIDED BY TOTAL DELIVERIES TIMES 1000
RATES ARE NOT CALCULATED FOR LESS THAN 100 DELIVERIES OR LESS THAN 5 PERINATAL DEATHS

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Key to Abbreviations

C—Correspondence

C&O—Committees & Organizations
PN—President's Newsletter

BR—Book Review

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NORTH CAROLINA MEDICAL SOCIETY

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held at
Pinehurst, North Carolina

May 20-24, 1972

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OFFICERS—1972-1973

<i>President</i>	John Glasson, M.D., 306 S. Gregson St., Durham 27701
<i>President-Elect</i>	George G. Gilbert, M.D., 1 Doctors Park, Asheville 28801
<i>First Vice-President</i>	Frank R. Reynolds, M.D., 1613 Dock St., Wilmington 28401
<i>Second Vice-President</i>	Harry H. Summerlin, Sr., M.D., Box 506, Laurinburg 28352
<i>Secretary</i>	E. Harvey Estes, Jr., M.D., (1973), Duke Univ. Med. Ctr., Durham 27710
<i>Speaker</i>	James E. Davis, M.D., 1200 Broad St., Durham 27705
<i>Vice-Speaker</i>	Chalmers R. Carr, M.D., 1822 Brunswick Ave., Charlotte 28207
<i>Past-President</i>	Charles W. Styron, M.D., 615 St. Mary's St., Raleigh 27605
<i>Executive Director</i>	William N. Hilliard, 222 N. Person St., Raleigh 27611

COUNCILORS AND VICE-COUNCILORS

<i>First District:</i>	Edward G. Bond, M.D., Chowan Medical Center, Edenton 27932 (1974)
<i>Vice-Councilor:</i>	Joseph A. Gill, M.D., 1202 Carolina Ave., Elizabeth City 27909 (1974)
<i>Second District:</i>	Joseph Benjamin Warren, M.D., Box 1465, New Bern 28560 (1973)
<i>Vice-Councilor:</i>	Emil Charles Beyer, M.D., Lands End Rd., Spooners Creek, Morehead City 28557 (1973)
<i>Third District:</i>	E. Thomas Marshburn, Jr., M.D., 1515 Doctors Circle, Wilmington 28401 (1973)
<i>Vice-Councilor:</i>	John Olin Perritt, Jr., M.D., P. O. Box 3686 Azalea Sta., Wilmington 28401 (1973)
<i>Fourth District:</i>	Harry H. Weathers, M.D., Central Medical Clinic, Roanoke Rapids 27870 (1974)
<i>Vice-Councilor:</i>	Robert H. Shackelford, M.D., 115 W. Main St., Mt. Olive 28365 (1974)
<i>Fifth District:</i>	Albert Stewart, Jr., M.D., 114 Broadfoot Ave., Fayetteville 28305 (1975)
<i>Vice-Councilor:</i>	August M. Oelrich, M.D., Box 1169, Sanford 27330 (1975)
<i>Sixth District:</i>	John W. Watson, M.D., 104 New College St., Oxford 27565 (1974)
<i>Vice-Councilor:</i>	J. Kempton Jones, M.D., 1001 S. Hamilton Rd., Chapel Hill 27514 (1974)
<i>Seventh District:</i>	Jesse Caldwell, Jr., M.D., 114 W. Third Ave., Gastonia 28052 (1975)
<i>Vice-Councilor:</i>	William Thomas Raby, M.D., 1012 Kings Drive, Charlotte 28207 (1975)
<i>Eighth District:</i>	Thornton R. Cleek, M.D., 379 S. Cox St., Asheboro 27203 (1973)
<i>Vice-Councilor:</i>	Ernest B. Spangler, M.D., 3811 Henderson Rd., Greensboro 27410 (1973)
<i>Ninth District:</i>	J. Henry Cutchin, Jr., M.D., Sherrills Ford 28673 (1973)
<i>Vice-Councilor:</i>	Verne H. Blackwelder, M.D., Box 431, Lenoir 28645 (1973)
<i>Tenth District:</i>	Kenneth Edward Cosgrove, M.D., 510 7th Ave., W., Hendersonville 28739 (1975)
<i>Vice-Councilor:</i>	Otis Bentley Michael, M.D., Suite 208, Doctors Bldg., Asheville 28801 (1975)

SECTION CHAIRMEN—1972-1973

<i>Family Physicians:</i>	James G. Jones, M.D., 510 College St., Jacksonville 28540
<i>Internal Medicine:</i>	Charles L. Herring, M.D., 310 Glenwood Ave., Kinston 28501
<i>Ophthalmology and Otolaryngology:</i>	Lee A. Clark, Jr., M.D., Wilson Clinic, Wilson 27893
<i>Surgery:</i>	Charles P. Nicholson, Jr., M.D., 3108 Arendell St., Morehead City 28557
<i>Pediatrics:</i>	David T. Tayloe, M.D., 608 E. 12th St., Washington 27889
<i>Obstetrics and Gynecology:</i>	Louis R. Wilkerson, M.D., 100 S. Boylan Ave., Raleigh 27603
<i>Public Health and Education:</i>	Ruth R. Burroughs, M.D., 3737 Jamestown Circle, Raleigh 27609
<i>Neurology and Psychiatry:</i>	Salvadore J. Cefalu, M.D., Dorothea Dix Hospital, Sta. B., Raleigh 27602
<i>Radiology:</i>	Morris A. Jones, Jr., M.D., 3724 Darwin Rd., Durham 27707
<i>Pathology:</i>	William W. Johnston, M.D., Duke Medical Center, Box 3436, Durham 27710
<i>Anesthesiology:</i>	Merel H. Harmel, M.D., Duke Univ. Med. Ctr., Box 3094, Durham 27710
<i>Orthopaedics:</i>	John L. Wooten, M.D., 6 Medical Pavilion, Greenville 27834
<i>Dermatology:</i>	David G. Welton, M.D., 1012 Kings Drive, Charlotte 28283
<i>Urology:</i>	Percy Lee Freeman, M.D., 406 N. Highland St., Gastonia 28052
<i>Student AMA Chapters (SAMA):</i>	

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

- DONALD B. KOONCE, M.D., 1601 Medical Center Drive, Wilmington 28401—
2 year term (January 1, 1973 to December 31, 1974)
- FRANK W. JONES, M.D., Rt. 3 Westlake Hills, Newton 28658—2 year term
(January 1, 1973 to December 31, 1974)
- DAVID G. WELTON, M.D., 1012 Kings Drive, Charlotte 28283—2 year term
(January 1, 1972 to December 31, 1973)
- AMOS N. JOHNSON, M.D., P. O. Box 158, Garland 28441—2 year term
(January 1, 1972 to December 31, 1973)

ALTERNATES TO THE AMERICAN MEDICAL ASSOCIATION

- JAMES E. DAVIS, M.D., 1200 Broad St., Durham 27705—2 year term (January
1, 1973 to December 31, 1974)
- LOUIS DES. SHAFFNER, M.D., Bowman Gray, Winston-Salem 27103—2 year term
(January 1, 1973 to December 31, 1974)
- JOHN GLASSON, M.D., 306 S. Gregson St., Durham 27701—2 year term (January
1, 1972 to December 31, 1973)
- EDGAR T. BEDDINGFIELD, JR., M.D., Wilson Clinic, Wilson 27893—2 year term
(January 1, 1972 to December 31, 1973)

STAFF OF HEADQUARTERS OFFICE

- Executive Director*—MR. WILLIAM N. HILLIARD, Raleigh
- Assistant Executive Director*—MR. DAN I. MAINER, Raleigh
- Assistant to the Executive Director*—MRS. LARUE A. KING, Raleigh
- Controller*—MR. GARLAND R. PACE, Raleigh
- Field Representative*—MR. STEPHEN C. MORRISSETTE, Raleigh
- Field Representative*—MR. GENE LANE SAULS, Raleigh
- Membership Secretary*—MRS. DEANNA GODWIN, Raleigh
- Advertising Secretary*—MISS KATHERINE LANGDON, Raleigh
- Headquarters Secretary*—MRS. LINDA BLANTON, Raleigh
- Public Relations Secretary*—MISS PAT PAYNTER, Raleigh
- Physician Placement Secretary*—MRS. SCOTTIE BAKER, Raleigh
- Receptionist*—MRS. GINNY NICHOLS, Raleigh
- Equipment Operator*—MR. HARRY L. COPE, Raleigh

STAFF (Outside Headquarters Office)

- ROBERT W. PRICHARD, M.D., *Editor*—NORTH CAROLINA MEDICAL JOURNAL,
Winston-Salem
- MISS LOUISE MACMILLAN, *Assistant Editor*, Winston-Salem
- RON W. DAVIS, Ed.D., *Consultant for Medical Education*, Durham

1972

Compilation of Annual Reports

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CONSTITUTIONAL SECRETARY

The membership of the Society on December 31, 1971 was 3,972 including 285 Life Members, 29 student members, 13 intern/resident members and one affiliate member. This represents an addition of 207 members since last year. It is heartening to note that six sixth of this growth is related to increased student and intern/resident membership. It is my firm belief that this infusion of younger members is a healthy development for all parties. These young men and women will see that most doctors support constructive social change, and we in turn will be exposed to new ideas, most of which are worthy of serious study.

The new headquarters building has produced the expected result—more service for our membership with more efficiency. The staff is steadily increasing its services to other physician groups, such as specialty societies, which is expected to have a unifying effect on the profession within the state. They can now share information, mailing lists, meeting times and places, and many other things more easily. The willingness of the staff to move in this direction should be supported and commended.

E. Harvey Estes, Jr., M.D., Constitutional Secretary

REPORT OF THE EXECUTIVE DIRECTOR

Dedication of the new Headquarters Building was one of the more notable events of the Society year. Formal Dedication Ceremonies were held on Sunday afternoon, October 10, 1972 and featured an address by President Charles W. Styron and the Honorable Robert W. Scott. An estimated 300 persons, including physician members and their guests, were on hand on the rainy cold day for the dedication program. At the time of the dedication, the Society and some tenants had occupied the building for seven months. The building is now completely and fully occupied with the Medical Society utilizing all first floor space and the second floor being leased to tenants.

President Charles W. Styron, during his year in office has certainly been a leader of decision and judgment. He is a principal officer in whom the membership has justly placed their trust. His wise guidance willingly rendered is deeply appreciated by your Executive Director and I would certainly be remiss not to express appreciation for his advice and counsel in administering the affairs of the Society.

The entire staff has served the Society in a very dedicated and commendable fashion, frequently beyond the call of duty. The Staff Assistants have reflected increasing capacity for performance of duties assigned and a willingness to sacrifice time and effort for the Society and the good of the profession. Any Executive Director would be fortunate to have similarly competent people assisting with the duties of the headquarters office.

There was a small but steady gain in membership in 1971 over 1970. On December 31, 1971 the total membership in the State Society stood at 3,972 as compared with 3,765 on that same date for 1970. This total breaks down as follows: 3,631 active dues paying mem-

bers, 13 Honorary, 13 Intern/Resident, 29 Student, 1 Affiliate, and 285 Life members. Since January 1, 1971 there have been 264 New Members joining the Society.

As of April 1, 1972 there were 3827 members of the State Society after taking into account deceased members during the past year and members who have moved out of state. There are, admittedly, a few slow paying members who we do hope to collect dues from within the next few weeks so that we do anticipate a continuing small net gain in membership by the end of 1972.

A copy of the Auditor's Report is contained in this compilation of Annual Reports reflecting that all funds and assets of the Society have been properly accounted for on the books of the Society. The Audit Report as submitted by A. T. Allen & Company, under date of January 14, 1972, stands as a self explanatory report of the Treasurer for the calendar year 1971 and is recommended to you for approval.

The Audit Report also reflects the 1971 management of the *North Carolina Medical Journal* and we trust that this portion of the Audit Report will suffice as a report on the business affairs of the *Journal* by the Business Manager. As has been the case for a number of years, all *Journal* income was consumed in the production cost of the publication.

On instruction from the Editorial Board, a new printing contract for the *North Carolina Medical Journal* was negotiated during the latter months of 1971 with a different company for the production of the *Journal*. Printing of the publication by the new firm began with the January 1972 issue utilizing new format, typefaces and cover design.

As a continuation of the review of headquarters office operations and reorganization efforts, the Society retained Mr. Gerard W. Frawley, of Miami, Florida for a management audit visit. Mr. Frawley visited the Headquarters Office and interviewed staff and principle officers of the Society during the period October 19-21, 1971. He made a report with recommendations to President Styron on February 7, 1972. A number of recommendations encompassed in the report have already been implemented and others will be accomplished as soon as practicable.

Among the changes recommended in the management audit report were the appointment of an Assistant Executive Director and change in the title of the Office Manager. Accordingly, effective March 1, 1972 Mr. Dan Mainer was appointed Assistant Executive Director and Mrs. LaRue King was named Assistant to the Executive Director.

The administrative chores related to staffing sixty-five State Society Committees, arranged under the seven Commissions, have pressed all staff members to a peak of performance. The Executive Council authorized the employment of an additional Field Representative and interviews are currently being conducted in search of the most appropriate individual. Hopefully, the addition of another staff member will help in spreading the work load.

The so-called "Project Unity" whereby the State Society Headquarters staff will provide secretarial, print-

ing, addressing service, and staffing assistance to medical specialty organizations, is continuing on a fee for service basis to the related medical groups. Regular assistance is being rendered to the North Carolina Society of Internal Medicine and to the Auxiliary to the Medical Society with occasional services and addressing for other medical organizations.

A major staff task and responsibility continues to be the arranging and staging of the Annual Meeting of the Society, including two meetings of the House of Delegates, General Sessions on three days, thirteen Scientific Specialty Section Meetings, Reference Committee Hearings, and display areas for the Scientific and Technical exhibits, in addition to the Annual President's Dinner and all other related functions at the meeting. The work of preparing for three regular Executive Council meetings has consumed a considerable amount of the time of some members of the staff.

Three new programs not heretofore scheduled were held during the 1971-72 Society year. These included: The Symposium on Computers and Business Machines in Medical Practice on March 30, 1972 at the Medical Society Building in Raleigh; the Joint Conference for Hospital Trustees, Administrators and Hospital Medical Staffs on January 28, 1972 at Pinehurst; and the Sports Medicine Symposium on July 4, 5, 6, 1971 at Wrightsville Beach.

Most other annual projects and activities of the Society have continued in a manner similar to previous years. Among the more important of the continuing projects is the Annual Conference of County Medical Society Officers and Committeemen as a Leadership Conference on Friday evening and Saturday, January 28-29, 1972; the Annual Committee Conclave held at

Mid Pines Club in Southern Pines, September 22-23, 1971; presentation of gift subscriptions of the AMJ magazine *Today's Health* to the Governor, Council of State, members of the General Assembly, Supreme and Superior Court Judges, and each College Library; publication of the Public Relations Bulletin on a nine issues per year schedule; an educational exhibit at the North Carolina State Fair in October; support of the State High School Science Fair Program; the presentation of First Aid competition trophies to the North Carolina Association of Rescue Squads; a County Medical Society "Secretary's Check List for 1972"; and a two day Speech Training Session for Society Leaders in Raleigh in November.

The staff has fully participated in these project efforts throughout the year, and in most cases were totally responsible for the arrangements for the various projects handling them efficiently and well with evidence of teamwork where more than a single staff person needed to be involved. I would also want the membership to be aware of my gratitude to all the secretarial staff for loyal and efficient efforts on behalf of the Society and all of the staff have served the Society well.

Finally, special tribute would be noted on behalf of the staff assistants without whose concern with all of the Society's activities not nearly so much could have been accomplished on your behalf. They include Mr. Dan Mainer as Assistant Executive Director and Fie Representative, Mr. Garland Pace as Controller, Mr. LaRue King as Assistant to the Executive Director, and Mr. Bryant Paris as Administrative Assistant. They deserve your support and appreciation.

William N. Hilliard, Executive Director

AUDITOR'S REPORT

**MEDICAL SOCIETY OF THE STATE
OF NORTH CAROLINA, INCORPORATED**
Raleigh, North Carolina

12 Months Ended December 31, 1971

OFFICERS

Dr. Charles W. Styron	President	Raleigh, N. C.
Dr. John Glasson	President-Elect	Durham, N. C.
Dr. Kenneth E. Cosgrove	First Vice-President	Hendersonville, N. C.
Dr. William H. Romm	Second Vice-President	Moyock, N. C.
Dr. E. Harvey Estes, Jr.	Secretary	Durham, N. C.
Dr. James E. Davis	Speaker of the House	Durham, N. C.
Dr. Chalmers R. Carr	Vice-Speaker of the House	Charlotte, N. C.
Dr. Louis DeS. Shaffner	Past President	Winston-Salem, N. C.
Mr. William N. Hilliard	Executive Director	

Chairman and Members of the Finance Committee
Medical Society of the State of North Carolina, Inc.
Raleigh, North Carolina

Gentlemen:

Pursuant to engagement, we have audited the books and records of the Medical Society of the State of North Carolina, Inc., Raleigh, North Carolina, for the period beginning January 1, 1971, and ending December 31, 1971, and present herewith our report.

EXHIBITS AND SCHEDULES

In presenting our findings, as the result of the audit, we have prepared four Exhibits and five Schedules, as outlined in the Index, which are attached hereto as a part of this report.

Balance Sheet—Exhibit "A":

The first statement is a list of the Assets, Liabilities, Reserves, and Fund Balances, which we designate as Balance Sheet, December 31, 1971, Exhibit "A". This statement has been divided into two sections. One contains the Current Operating Fund, which represents the Current Assets, Liabilities, and Reserves. The other has been designated as a Capital or Non-Operating Fund and containing the office equipment, real estate and capital stock owned and used by the Medical Society. The Cash on Hand and in Bank is made up of \$25.00 Petty Cash Funds and \$352,143.02 in a checking account at First-Citizens Bank & Trust Company, Raleigh, North Carolina. There was \$499.46 on savings deposit with the same bank. The Cash in Bank was verified through a reconciliation of the balances as shown by the records of the Medical Society with a certificate obtained independently from the bank. This reconciliation is shown in detail in Schedule—1 of this report.

Accounts Receivable—Regular in the amount of \$3,327.59 are shown on the Balance Sheet. The balance represents the total of several uncollected balances due for local advertising in the State Medical Journal.

Accounts Receivable—National Advertising in the amount of \$5,166.48 represents November and December, 1971, National Advertising in the State Medical Journal.

Air Travel Deposit of \$425.00 in cash deposited with Eastern Airlines for air travel credit cards.

The real estate, capital stock and office equipment and furniture shown on Balance Sheet in the amount of \$1,324,426.84 is listed in detail in Schedule—2. The items shown represent cost value of the equipment to the Medical Society as no depreciation has been recorded. As there were liabilities of \$350,000.00 outstanding against the construction in progress, and a \$7,800.00 mortgage against land purchased, we have shown the net amount of \$966,626.84 as Fund Balances—Capital Fund—in the Balance Sheet. Schedule—5 reveals \$1,000,275.94 has been spent on the construction in progress—New Headquarters Facility Building.

Under the "Liabilities" section we have listed those accounts, expenses, etc., incurred prior to December 31, 1971, for which statements or accounts were rendered or payment was due.

The Accounts Payable—Trade, in the amount of \$3,656.11 represents unpaid accounts at December 31, 1971. Most of these items were paid during the course of the audit.

The \$2,312.00, Dues to be Refunded, represents State dues collected which are refundable to the members. The \$110,240.00, "Due American Medical Association," is 1972 A. M. A. dues collected in 1971. The \$560.00 "American Medical Association Dues in Escrow," represents dues paid to the State Society but which cannot be remitted to the National Society at the time due to diverse disqualifying reasons. At December 31, 1971, the Society had collected from members \$7,790.00 for MEDPAC contributions and \$38,089.00 for county dues. These items will be remitted to the respective organizations in regular course. The payroll taxes, \$449.46, for Social Security and \$2,749.44 for employees' withholding, were paid during the course of the audit. There is a mortgage payable on Person Street property, in Raleigh, to G. M. Greenfield for \$7,800.00 due \$2,600.00 each August 28 for three years. The loans payable of \$350,000.00 are funds borrowed on the construction in progress of the New Headquarters Facility Building from First-Citizens Bank & Trust Company, Raleigh, North Carolina.

The deferred credits of \$134,039.00 are for payments of \$1,140.00 received on technical exhibits space for the 1972 Convention, and \$132,899.00 on 1972 membership dues. These remittances were received in 1971 and will be transferred to the income accounts in 1972.

The Reserve accounts set forth on Exhibit "A" are for specific purposes or specific projects, which normally last for periods longer than one year; therefore, special provisions are made to set aside funds for these specified Reserves.

The Fund Balance section of the Balance Sheet is comprised of two figures, \$50,794.25 being the surplus of the Current Operating Fund at the year-end, and \$966,626.84 representing the balance of Capital Fund. It should be observed that all available Current Operating Funds were transferred to the Capital Funds because of the construction of the New Headquarters Facility.

Statement of Fund Balances—Exhibit "B":

The second statement is an analysis of the changes in Fund Balances during the year and is detailed on Exhibit "B."

Statement of Income and Expenses—Exhibit "C":

A statement showing a budget comparison of the income and expenses for the twelve-months period is given in Exhibit "C." This statement is, in effect, a statement of operations for the year, and by examination it may be observed that the Income of \$625,637.08 exceeds the Expenses of \$423,620.10 by \$202,016.98. There was included in the expenses \$50,989.68 in Capital Expenditures. Eliminating these, we show a margin from operations of \$253,006.66.

Comparing with the Budget we see that actual income was more than anticipated by \$54,087.08. The main items accounting for this were the rental income, and the large increase in annual dues.

Further comparisons reveal that the total actual expenses were \$147,929.90 less than the budget provision.

Cash Receipts and Disbursements—Exhibit "D":

A statement showing in detail the cash receipts and disbursements of the Society during the year under review is shown on Exhibit "D."

We made a careful analysis of the cash transactions and, where practicable, traced the receipts to their original source. Disbursements for expenses were sup-

ported by cancelled checks and invoices issued in the regular course of business. We believe the funds have all been accounted for.

GENERAL COMMENTS

A surety bond covering faithful performance of Mr. William N. Hilliard, Executive Director, in the amount of \$50,000.00, is in force, held by the Medical Society and was examined by us. We also examined and found in force a Primary Commercial Blank Honesty Bond in the amount of \$50,000.00; a fire insurance policy covering fire loss on new building of \$1,000,000.00; office equipment, books and records in the office of the Executive Director, Raleigh, North Carolina, in the amount of \$20,000.00; an Automobile Schedule Policy; a standard Workmen's Compensation and Employer's Liability Policy; a Comprehensive General Liability Policy, and an Accident Policy on Officers, Delegates and Staff.

We were extended every courtesy and cooperation during the course of the audit and we experienced no trouble in obtaining the necessary information for this report.

SCOPE OF EXAMINATION AND OPINION

We have examined the balance sheet of the Medical Society of the State of North Carolina, Inc. as of December 31, 1971, and the related statements of income and expense and fund balances for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of income and expense and fund balances present fairly the financial position of the Medical Society of the State of North Carolina, Inc. at December 31, 1971, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles for non-profit organizations applied on a basis consistent with that of the preceding year.

Very truly yours,
A. T. ALLEN & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

Raleigh, N. C.
January 14, 1972

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA, INCORPORATED
Raleigh, North Carolina

EXHIBIT "A"
BALANCE SHEET
December 31, 1971

ASSETS:**CURRENT OPERATING FUND:**

Cash on Hand and in Banks (Schedule—1).....	\$ 352,967.48	
Accounts Receivable—Regular.....	2,327.59	
Accounts Receivable—National Advertising.....	5,166.48	
Air Travel Deposit.....	425.00	
TOTAL CURRENT OPERATING FUND.....		\$ 360,886.55

CAPITAL OR NON-OPERATING FUND—SCHEDULE—2

Real Estate—Land—Durham-Raleigh Highway.....	\$ 26,604.55	
—Land—Lane and Person Streets, Raleigh, N. C.....	227,733.90	
Office Furniture and Fixtures.....	69,612.45	
Construction in Progress—New Headquarters Facility.....	1,000,275.94*	
Capital Stock, Common—State Medical Journal Advertising Bureau.....	200.00	
TOTAL CAPITAL OR NON-OPERATING FUND.....		1,324,426.84

TOTAL ASSETS.....		\$ 1,685,313.39
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FOOTNOTE:

The Society was liable for uncompleted contracts on the New Headquarters Facility Building, at 12/31/71, for an estimated additional cost of \$55,863.12 which amounts are not disclosed in the balance sheet above. These estimated liabilities will be paid as the contracts are completed, in the course of 1972 business, and will be paid from additional dues and additional committed loan funds from First-Citizens Bank & Trust Company.

LIABILITIES, RESERVES AND NET WORTH:**LIABILITIES:**

Accounts Payable—Trade.....	\$ 3,656.11	
Dues to be Refunded.....	2,312.00	
Due American Medical Association.....	110,240.00	
Due American Medical Association—Dues in Escrow.....	560.00	
Due County Medical Associations.....	38,089.00	
Due MEDPAC.....	7,790.00	
Federal and State Income Tax Withheld.....	2,749.44	
Payroll Taxes Payable.....	449.46	
Accrued Interest Payable—First-Citizens Bank & Trust Co.....	2,336.81	
Mortgage Payable—222 North Person Street—G. M. Greenfield.....	7,800.00	
Loans Payable—Construction in Progress—First-Citizens Bank & Trust Company.....	350,000.00	
TOTAL LIABILITIES.....		\$ 525,982.82

DEFERRED CREDITS:

Advance Payments on Technical Exhibit Space at 1972 Convention.....	\$ 1,140.00	
Advance Payment on 1972 State Membership Dues.....	132,899.00	
TOTAL DEFERRED CREDITS.....		134,039.00

RESERVES:

Reserve for N. C. Hospitality Suite.....	\$ 460.01	
Reserve for Traffic Liability Safety Program.....	135.28	
Reserve for Mental Health State Conference Programs.....	3,302.87	
Reserve for Mental Health Contactorama Programs.....	3,539.92	
Reserve for Section on O & O.....	432.40	
TOTAL RESERVES.....		7,870.48

FUND BALANCES:

Current Operating Fund (Exhibit "B").....	\$ 50,794.25	
Capital Fund (Exhibit "B").....	966,626.84	
TOTAL FUND BALANCES.....		1,017,421.09

TOTAL LIABILITIES, RESERVES, AND NET WORTH.....		\$ 1,685,313.39
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EXHIBIT "B"
STATEMENT OF FUND BALANCES
December 31, 1971

CURRENT OPERATING FUND:

Balance—January 1, 1971 (Deficit).....		\$(88,936.07)
ADD: Net Profit From Operations.....	\$253,006.66	
Adjustment for Greenfield Mortgage.....	7,800.00	260,806.66
LESS: Transfer to Capital Fund:		
Furniture and Fixtures.....	48,389.68	
Construction in Progress—New Headquarters Facility—Cash		
Outlay	72,686.66	121,076.34

TOTAL CURRENT OPERATING FUND—TO EXHIBIT "A"..... **\$ 50,794.**

CAPITAL FUND:

Balance—January 1, 1971.....	\$871,833.38
ADD: Expenditures Made Through Current Fund.....	121,076.34

TOTAL **992,909.72**

LESS: Furniture and Fixtures Sold, Abandoned or Disposed of.....	\$ 18,482.88
Adjustment for Greenfield Mortgage.....	7,800.00
	(26,282.88)

TOTAL CAPITAL FUND—TO EXHIBIT "A"..... **966,626.**

TOTAL FUND BALANCES—DECEMBER 31, 1971..... **\$1,017,421.**

EXHIBIT "C"
STATEMENT OF INCOME AND EXPENSES
12 Months Ended December 31, 1971

	Budget Provisions	Actual	Differen Over or (Und
INCOME:			
Membership Dues—Current and Prior Years.....	\$497,500.00	\$540,171.00	\$
Sales of Journals, Rosters and Value Scales.....	3,500.00	4,925.48	
Author Contributions To Cuts.....	125.00	—0—	
Revenue Unexpected	500.00	3,279.80	
Sales of Technical Exhibit Space.....	14,500.00	12,319.00	
Journal Advertising—Local	11,000.00	9,645.28	
Journal Advertising—National	32,000.00	31,361.77	
Commission (1%) from AMA for Dues Collected.....	3,000.00	3,455.60	
Commission (1%) from MEDPAC for Dues Collected.....	250.00	221.75	
Rental Income	9,175.00	17,793.33	
Interest Income from Savings Account.....	—0—	1,464.07	
Special Donation on Furniture & Fixtures.....	—0—	1,000.00	
TOTAL INCOME	\$571,550.00	\$625,637.08	\$ 54,087.0
EXPENSES:			
Executive Budget:			
A-1 Expense—President	\$ 6,000.00	\$ 3,383.98	\$
A-2 President's Secretarial Assistance.....	5,000.00	2,847.31	
A-3 Travel—Secretary	1,000.00	159.35	
A-4 Salary—Executive Director—Treasurer	20,000.00	20,000.00	
A-5 Travel—Executive Director—Treasurer	6,000.00	4,075.02	
A-6 Executive Office, Secretarial & Clerical Assistance.....	36,000.00	33,785.30	
A-7 Executive Office Equipment—Replacements.....	2,000.00	2,069.15	
A-8 Expenses—Executive Office	22,500.00	18,251.65	
A-9 Bonding	—0—	—0—	
A-10 Audit	1,700.00	2,033.00	
A-11 Taxes (Salary Tax).....	4,503.00	4,049.93	
A-12 Insurance	2,150.00	2,164.50	
A-13 Membership Record System.....	8,600.00	7,523.67	
A-14 Publications, reports, Executive Aids.....	300.00	290.50	
A-15 Insurance: Interest Insurance and Retirement Plan.....	5,295.00	5,295.30	
A-16 Executive Vice-President—Retirement Income.....	9,000.00	9,000.00	
A-17 Salary—Office Manager	11,000.00	11,000.00	
A-20 Salary—Administrative Assistant	9,800.00	9,800.00	
A-21 Travel—Administrative Assistant	2,000.00	810.36	
A-22 Salary—Controller	13,500.00	13,500.00	
A-23 Salary—Field Representative No. 1.....	15,000.00	15,000.00	
A-25 Travel—Field Representative No. 1.....	5,000.00	2,700.13	
Total Executive Budget.....	\$186,348.00	\$167,739.15	\$ (18,608.8)

		Budget Provisions	Actual	Difference Over or (Under)
Journal Budget:				
B-1	Publication of Journal.....	\$ 45,000.00	\$ 41,578.00	\$
B-2	Cuts for Journal.....	500.00	—0—	
B-3	Salary—Editor	2,500.00	2,500.00	
B-4	Salary—Assistant Editor	6,400.00	6,400.00	
B-4	Expenses—Editorial Office	850.00	858.20	
B-6	Expenses—Business Manager's Office	700.00	485.26	
B-7	Equipment—Business Manager's Office	100.00	—0—	
B-8	Travel for Journal	200.00	33.78	
B-9	Payroll Taxes	834.00	843.97	
B-10	Sales Tax on Journal and Roster Sales.....	1,400.00	1,466.89	
B-11	Publication of Roster	7,000.00	7,490.45	
B-12	Expense—Executive Council Reports	7,000.00	3,686.80	
B-13	Salary—Advertising Secretary	5,670.00	6,006.26	
Total Journal Budget		\$ 78,154.00	\$ 71,349.61	\$ (6,804.39)
Intra-Functional Activity Budget:				
C-1	Expenses—Executive Council	\$ 4,000.00	\$ 3,204.08	\$
C-2	Expenses—Publication of Minutes, Transactions, Reports.....	1,000.00	1,308.81	
C-3	Expenses—Legislative Committees	5,000.00	3,473.77	
C-4	Expenses—Maternal Health Committee	4,000.00	42.24	
C-5	Expenses—Drug Abuse Committee	2,250.00	130.15	
C-6	Expenses—Arrangements Committee	100.00	—0—	
C-7	Expenses—Scientific Exhibits Committee	975.00	751.80	
C-8	Expenses—Mental Health Committee	400.00	410.05	
C-9	Expenses—Meditation Committee	200.00	28.63	
C-10	Expenses—Chronic Illness Committee	1,500.00	3.86	
C-11	Expenses—Committees in General	3,000.00	3,258.74	
C-12	Expenses—Committee on Nominations	100.00	—0—	
C-13	Expenses—Occupational Health Committee	100.00	66.10	
C-15	Expenses—Relative Value Studies Committee	550.00	110.00	
C-17	Expenses—Student AMA Committee	1,700.00	1,182.65	
C-18	Expenses—Disaster Medical Care Committee.....	300.00	35.24	
C-19	Expenses—Industrial Commission Committee	100.00	—0—	
C-20	Expenses—Constitution and By-laws Committee.....	300.00	40.00	
C-22	Expenses—Advisory to N. C. Dept. of Motor Vehicles	200.00	—0—	
C-24	Expenses—Anesthesia Study Committee	200.00	491.05	
C-26	Expenses—Blue Shield Committee	100.00	—0—	
C-28	Expenses—Social Services Programs	100.00	4.47	
C-30	Expenses—Committee on Liaison to Insurance Industry.....	300.00	324.23	
C-31	Expenses—Rural Health Function	700.00	448.12	
C-35	Expenses—Headquarters Facility Committee	200.00	20.89	
C-36	Expenses—Family & Marriage Counseling Committee.....	100.00	24.56	
C-37	Expenses—Medicine & Religion Committee.....	150.00	84.00	
C-38	Expenses—Committee on AMA-ERF	100.00	—0—	
C-40	Expenses—Scientific Awards Committee	100.00	—0—	
C-41	Expenses—Physical and Vocational Rehabilitation Committee.....	100.00	—0—	
C-42	Expenses—Eye Care & Eye Bank.....	100.00	—0—	
C-44	Expenses—Blue Ribbon Committee No. 1.....	100.00	20.60	
C-45	Expenses—Council on Review & Development.....	100.00	—0—	
C-46	Expenses—Committee on Finance	100.00	26.03	
C-48	Expenses—Medicare Committee	200.00	—0—	
C-49	Expenses—Medical Education Committee	2,000.00	1,499.40	
C-50	Expenses—Committee on Comprehensive Health Service Planning....	250.00	—0—	
C-51	Expenses—Medical Aspects of Sports Committee.....	500.00	1,035.57	
C-52	Expenses—Association of Professions	100.00	—0—	
C-53	Expenses—Physicians on Nursing	200.00	29.40	
C-55	Expenses—Personnel & Headquarters Opportunities Committee.....	100.00	—0—	
C-56	Expenses—President's Communications Program	1,000.00	606.58	
C-57	Expenses—Crippled Children's Program Committee	100.00	—0—	
Total Intra-Functional Activity Budget.....		\$ 32,775.00	\$ 18,661.02	\$ (14,113.98)
Extra-Functional Activity Budget:				
D-1	Expenses—Delegates to AMA	\$ 5,964.00	\$ 7,120.22	\$
D-2	Expenses—Conferences Dues	200.00	197.50	
D-3	Expenses—Woman's Auxiliary	4,000.00	3,501.70	
D-4	Expenses—Medical History Allocation	600.00	1,672.39	
Total Extra-Functional Activity Budget.....		\$ 10,764.00	\$ 12,491.81	\$ 1,727.81

	Budget Provisions	Actual	Difference Over or (Under)
Public Relations Budget:			
E-3 Expenses—Committee Chairman, Out of State Travel.....	\$ 500.00	\$ —0—	\$
E-9 Expenses—Audio-Visual Depiction	300.00	—0—	
E-10 Expenses—Educational Distributions	500.00	45.30	
E-11 Expenses—News and Press Releases.....	200.00	23.68	
E-12 Public Relations Bulletin	3,500.00	2,533.34	
E-13 State High School Science Fair Program.....	350.00	323.46	
E-14 Exhibits and Displays	300.00	410.83	
E-15 Annual Officers Conference	1,000.00	1,240.79	
E-17 Today's Health Magazine—Subscriptions	850.00	790.00	
E-18 Collateral Public Relations	500.00	23.22	
E-19 N. C. Rescue Squad First Aid Trophies.....	200.00	164.28	
Total Public Relations Budget.....	\$ 8,200.00	\$ 5,554.90	\$ (2,645.10)
Annual Sessions (117th) Convention Budget:			
F-1 Programs	\$ 2,000.00	\$ 1,681.75	\$
F-2 Hotel and Auditorium Expense.....	4,400.00	4,290.19	
F-3 Expenses—Publicity Promotion	600.00	548.28	
F-4 Entertainment	800.00	772.03	
F-5 Orchestra and Floor Entertainment.....	2,500.00	950.00	
F-6 Guest Speakers	900.00	684.66	
F-8 Electric Amplification	125.00	—0—	
F-9 Booth Installation and Supplies.....	5,000.00	4,590.09	
F-10 Projection Expenses	1,300.00	1,096.48	
F-11 Badges	200.00	—0—	
F-12 Transactions Reporting Service	2,500.00	2,269.05	
F-13 Rental—Extra Facilities	175.00	208.55	
F-14 Exhibitors Entertainment	750.00	703.70	
F-15 Banquet Expense	300.00	177.43	
F-16 Police Security	350.00	300.00	
Total Annual Sessions (117th) Convention Budget.....	\$ 21,900.00	\$ 18,272.21	\$ (3,627.79)
Miscellaneous Budget:			
G-1 Legal Counsel	\$ 10,300.00	\$ 10,221.61	\$
G-2 Reporting (Executive Council, Etc.).....	2,000.00	1,589.63	
G-3 Fifty Year Club	250.00	145.58	
G-4 Contingency and Emergency	2,294.00	4,686.61	
G-5 Employees Retirement System	12,000.00	14,869.60	
G-6 Ad Valorem Taxes (Property Hwy. 70).....	915.00	952.67	
G-7 Association of Professions	200.00	200.00	
G-9 Association of American Medical Colleges.....	250.00	—0—	
G-10 Expense of Commissioners	1,500.00	981.66	
G-11 Expenses of Executive Committee.....	300.00	—0—	
G-12 Expenses of Officers to National Meetings.....	3,000.00	1,834.98	
G-13 Travel and Maintenance Expense of Essential Staff— Out-of-State Sessions	1,000.00	866.00	
Total Miscellaneous Budget	\$ 34,009.00	\$ 36,348.34	\$ 2,339.34
Headquarters Facility Budget:			
Capital Investments:			
M-1 Application to Mortgage Payments.....	\$ 50,000.00	\$ —0—	\$
M-2 Application to Purchase of New Furniture and Fixtures.....	66,672.00	46,320.53	
M-3 Mortgage Payable on Greenfield Property.....	3,328.00	3,328.00	
M-4 Interest Cost on Mortgage.....	40,000.00	10,661.91	
Operating Costs:			
M-5 Utilities	8,000.00	7,940.94	
M-6 Insurance	1,350.00	949.00	
M-7 Taxes	16,000.00	9,269.99	
M-8 Water	700.00	262.47	
M-9 Janitorial Services	9,000.00	6,571.61	
M-10 Grounds Maintenance	750.00	787.40	
M-11 Building Repairs and Maintenance.....	900.00	239.09	
M-12 Heating A/C Repairs & Maintenance.....	2,700.00	342.96	
M-13 Moving Expenses	—0—	1,400.00	
M-14 Painting Filing Cabinets	—0—	799.00	
M-15 New Headquarters Facility—Miscellaneous	—0—	4,330.16	
Total Headquarters Facility Budget.....	\$199,400.00	\$ 93,203.06	\$ (106,196.94)
TOTAL EXPENSES	\$571,500.00	\$423,620.10	\$ (147,929.90)

	Budget Provisions	Actual	Difference Over or (Under)
SUMMARY:			
TOTAL INCOME			\$625,637.08
LESS: EXPENSES:			
Executive Budget		\$167,739.15	
Journal Budget		71,349.61	
Intra-Functional Activity Budget		18,661.02	
Extra-Functional Activities Budget		12,491.81	
Public Relations Budget		5,554.90	
Annual Sessions (117th) Convention Budget		18,272.21	
Miscellaneous Budget		36,348.34	
Headquarters Facility Budget		93,203.06	423,620.10
EXCESS OF INCOME OVER EXPENSES			\$202,016.98
ADD: Capital Expenditures From Current Funds			50,989.68
NET MARGIN FROM OPERATIONS			<u>\$253,006.66</u>

EXHIBIT "D"
CASH RECEIPTS AND DISBURSEMENTS
12 Months Ended December 31, 1971

RECEIPTS:

CASH ON HAND AND IN BANKS—JANUARY 1, 1971		\$ 229,305.51
ADD: CASH RECEIPTS:		
Income From Operations (Exhibit "C")	\$625,637.08	
Decrease in Accounts Receivable—Regular	2,216.05	
Increase in Payroll Taxes Unremitted	246.28	
Increase in Refunds Payable	1,061.42	
AMA Dues Collected	357,600.00	
County Dues Collected	125,150.00	
MEDPAC Dues Collected	23,005.00	
Hospital Savings Unremitted Payable	228.30	
Loan Proceeds Received From First-Citizens Bank & Trust Company—Additional 1971	240,000.00	
Advance Payments—State Society Dues 1972	132,899.00	
Advance Payments—Technical Exhibits 1972	1,140.00	
Accrued Interest Payable 12-31-71—Unremitted	2,336.81	
Accounts Payable—Trade 12-31-71—Unremitted	3,427.81	
TOTAL CASH RECEIPTS		<u>\$1,514,947.75</u>
TOTAL FUNDS TO ACCOUNT FOR		<u>\$1,744,253.26</u>
CASH DISBURSEMENTS:		
Expenditures From Operations (Exhibit "C")	\$423,620.10	
Increase in Accounts Receivable—National	959.02	
Disbursements on Construction in Progress	312,686.66	
Decrease in AMA Escrow Funds	10.00	
AMA Dues Remittances	348,990.00	
County Dues Remittances	120,122.00	
MEDPAC Dues Remittances	22,055.00	
Disbursements From Reserve—Section on O & O	15.00	
Disbursements From Reserve—N. C. Hospitality Suite	938.29	
Disbursements From Reserve—Medical Society History	2,440.43	
Disbursements From Reserve—Mental Health Contactorama	50.00	
Advance Payments—State Society Dues—1971—Transferred To Income	144,393.00	
Advance Payments—Technical Exhibits—1971—Transferred To Income	1,800.00	
Accrued Interest Payable 12-31-70—Paid 1971	908.26	
Accounts Payable—Trade 12-31-70—Paid 1971	12,298.02	
TOTAL CASH DISBURSEMENTS		<u>\$1,391,285.78</u>
CASH ON HAND AND IN BANKS—DECEMBER 31, 1971		<u>352,967.48</u>
TOTAL FUNDS ACCOUNTED FOR		<u>\$1,744,253.26</u>

SCHEDULE—1

CASH ON HAND AND IN BANKS (Including Savings)

December 31, 1971

FIRST-CITIZENS BANK & TRUST COMPANY, RALEIGH, N. C.:

Checking Account—No. 12-03-643.....	\$352,143.00
Savings Account—No. 0861010544.....	499.40
Petty Cash Fund—Office.....	75.00
Travel Advance Fund—Field Representative.....	250.00

TOTAL CASH \$352,967.40

SCHEDULE—2

SCHEDULE OF CAPITAL ASSETS

December 31, 1971

OFFICE FURNITURE AND FIXTURES:

1 Steel Filing Cabinet.....	\$ 71.75	1 Mosler Fire-Proof File—Four Drawer.....	319.00
2 Gray Steel Filing Cabinets.....	103.00	3 Cory Five Drawer Letter Files.....	290.50
1 Four Drawer Steel Filing Cabinet.....	78.03	1 Cosco Secretarial Chair.....	30.00
2 Remington Rand Electric Adding Machine.....	215.01	1 Combo Binding Machine.....	46.50
1 Metal Storage Cabinet.....	78.28	1 Model L-H Letter Opener.....	58.00
1 Metal Filing Cabinet.....	92.76	1 18" Pendaflexer—Two Drawer.....	43.00
1 Metal File and Sections.....	68.55	7 Four Drawer Files.....	223.00
2 Typewriters—Large Type (Bulletin).....	321.23	1 Underwood Electric Typewriter—700 TW No. 9694676.....	334.00
1 Metal File and Frames.....	93.07	1 Projection Pointer.....	97.00
1 Portable Lectern.....	29.93	2 Shelving Units.....	66.00
1 Metal File.....	114.33	1 Eight Station Collator—Paper Gatherer.....	346.00
1 Five Drawer Letter File.....	122.78	1 3 M Portable Compact Copier.....	69.00
2 Five Drawer Files.....	245.56	1 TU-DROR Pendaflexor File.....	63.00
1 A. B. Dick Offset Duplicator.....	3,204.53	1 Electrosumma 20 Adding Machine No. 6638949.....	184.00
2 Four Drawer Durable Files.....	61.70	1 Dual Purpose Hand Truck.....	47.00
1 Postage Mailing Machine.....	855.70	1 F & E Checkwriting Machine.....	115.00
1 Book Case Section No. 813 Walnut.....	29.26	1 Desk—Walnut Finish.....	118.00
3 Letter Size Files.....	103.72	1 Remington Electric Typewriter No. 634800.....	424.00
1 TU-24 Star Tube Roll File.....	40.00	1 Remington Electric Typewriter No. 635838.....	424.00
1 122 H Steel Cart W/3 Shelves.....	35.76	1 Four Drawer File (Dr. Styron).....	88.00
6 4 Drawer Letter Size Files.....	199.31	1 Used Copying Machine—A. B. Dick No. 675.....	1,000.00
1 Electric Projection Pointer.....	77.15	1 Supply Cabinet.....	37.00
1 Toledo Postage Scale (Used).....	154.50	1 Storage Cabinet.....	37.00
1 Three Section Book Case.....	137.61	1 Metal Letter File with Lock.....	61.00
1 Divisumma 24 Calculator.....	627.79	1 Storage Cabinet.....	37.00
1 Walnut Dictionary Stand.....	67.07	1 Royal Typewriter No. 4132-506.....	133.00
4 Side Chairs.....	73.05	1 Four Drawer Metal File.....	69.00
1 Premier Ream Cutter.....	259.47	1 Two Drawer Metal File.....	18.00
1 No. 1900 Addressograph.....	500.00	1 Supply Cabinet.....	75.00
1 Carrying Case For Adding Machine.....	18.49	1 Metal Storage Cabinet.....	57.00
1 Four Drawer Letter File.....	173.66	1 Folder Machine and A. B. Dick Stand.....	397.00
1 Four Drawer No. 24-A File Cabinet.....	41.95	1 Model DLS Screen.....	32.00
1 Remington Typewriter No. 3064244.....	388.90	1 Record Player.....	101.00
1 Remington Typewriter No. 3521299.....	388.90	1 Microphone and Stand.....	19.00
1 Hand Truck.....	13.59	1 Slide Projector—With Case.....	94.00
1 Section Steel Shelving.....	123.60	1 Lectern Mike.....	56.00
1 Scriptor 13" Elite Electric Typewriter No. 9709767.....	311.85	1 Camera & Flash.....	88.00
4 No. 8 B 51 Five Drawer Files.....	401.78	1 Metal File.....	95.00
1 Electric Pencil Sharpener.....	34.98	2 Four Drawer Files.....	194.00
1 Feeder Unit for Addressograph.....	936.53	1 Underwood Scriptor Electric Typewriter No. 21-8721980.....	337.00
1 Scriptor Electric Typewriter No. 1089421.....	366.17	1 Crestline Deluxe Projector.....	79.00
2 Five Drawer Files—Gray.....	200.98	1 Underwood Scriptor Electric Typewriter No. 8654172.....	300.00
1 Storage Cabinet.....	83.17	1 Carri-Voice and Revere Tape Recorder No. 3001312.....	480.00
1 I. B. M. Equipment.....		2 No. 8 No. B No. 51 Gray File Cabinet.....	236.00
17 Control Panels.....	374.27		
1 Sorter Rack.....	49.70		
5 Sets Manual Wire Complements.....	177.31		
1 Twenty Drawer Card File.....	284.96		
1 Control Panel Cabinet.....	71.54		

1 8 B 51 Gray File Cabinet.....	100.57	2 65 BC Chairs.....	436.43
1 Five Drawer Gray File Cabinet.....	100.48	1 2562 WRBC Table.....	67.77
1 Bell & Howell Projector.....	175.00	4 72 USBS Chairs.....	349.35
2 Four Drawer File.....	63.86	1 Frigidaire Refrigerator—Tuttle	349.68
2 Cory Five Drawer Files.....	228.66	1 Frigidaire Range	246.17
1 Olympia Electric Typewriter		2 Royal Metal 30 x 75.....	228.50
No. 27-494032	431.05	1 Conference Table	104.22
1 Steel File	88.27	6 Alma Book Cases.....	495.72
2 Four Drawer Files.....	63.86	4 Wall Poles	31.44
1 Portable Lectern	29.67	2 File Units	175.22
1 Eight Yard Dempster Dumpmaster		1 Sliding Door Cabinet.....	53.35
Sanco Corporation	528.37	6 Alma Shelves	47.17
4 Floor Ash Trays—Duk-It—ROS.....	96.00	1 Corry Library Table.....	195.77
3 Dual Receptacle Duk-It.....	117.00	6 All Steel Black Desks—A. Williams.....	1,602.54
5 Duk-It Black Letter Trays.....	37.50	1 All Steel Black Table 36 x 36.....	66.31
2 No. 1605 Ash Trays.....	126.00	1 Lectern	68.22
6 Duk-It Waste Baskets.....	66.60	1 Chalkboard	67.06
9 Duk-It Calendars and Bases.....	21.60	1 Conference Table—Oil Walnut Finish.....	3,982.50
8 No. 1607 Ash Trays—Duk-It.....	31.20	1 Lectern—Oil Walnut Finish.....	239.99
3 Duk-It Ice Water Pitcher & Tray.....	126.00	2 Tables—White—163 F	100.29
6 No. 6023 Chairs—Serapi Blue—Navaho		12 1258 DS Chairs—Red Fabric.....	1,863.78
Fabric	497.88	3 Cloaks—HM Black Case—Storr Sales.....	139.21
2 No. 6023 Chairs—Soot Black—Navaho		Draperies—Weaver Textile	6,620.21
Fabric	165.96	7 Art Metal Bookcase Sections—Storr Sales	551.06
0 No. 6055 UA Chairs—Ebony—Navaho		1 Vogel Peterson Costumer, Wall Shelf &	
Fabric	1,940.40	Coat Hangers	80.42
2 No. 1086 Howe Folding Tables.....	2,640.00	1 Chair and Table—ROS.....	152.98
4 2530 Bench—DG	940.36	1 Toro Lawn Mower—Flythe.....	124.58
3 19-12 Pot Cover.....	49.59	2 1 W Letter Trays—D. G.....	20.59
1 67 BC Sofa.....	613.87	2 72 USBS Chairs	201.32
2 65 BC Chairs.....	487.13	1 10 N Waste Basket.....	17.73
1 252 Coffee Table.....	242.46	1 2562 WR/BC TABC.....	78.06
3 19-12 Pot Cover.....	49.59	4 Bookcase Sections and one end panel	
1 8623 Ash Tray.....	12.67	No. 2118—Storr Sales.....	342.31
0 1601-G Stacking Chair.....	2,295.75	6 No. 800 Walnut Oil Shelves—E & B.....	63.65
8 1600-1 Dolly	132.25	4 Lockers—Gray Finish	186.70
4 309 F-2 Table.....	262.30	1 560 R Pedestal Desk and Chair—	
6 1601 Stacking Chair.....	238.05	Storr Sales	395.30
2 72 UBC Chairs.....	138.32	1 Twenty Drawer Card File—Clyde Rudd..	210.73
4 72 US-BS Chairs.....	349.37	1 Drain Board for Printing Room	
6 1514 WRC Desks.....	1,384.28	Montgomery-Green	72.10
1 1519 WRC Table Desk.....	215.47	1 Control Panel Cabinet—Tab Products.....	87.86
1 1546 WRC Secretarial Desk.....	367.55	1 Edison Voicewriter—T. A. Edison Inc.....	1,548.46
6 541 WRC Credenzas.....	1,776.66	1 File Cabinet—W. B. Bunn.....	150.00
1 541 WRC Credenza.....	333.38		
1 541 Credenza	409.43		
8 72 UBC Chairs.....	585.25		
6 72 UBC Chairs.....	457.09		
2 72 UBC Chairs.....	179.64		
8 10 N, 10 Waste Baskets.....	193.97		
8 2 W Letter Trays.....	163.11		
2 72 US—BS Chairs.....	188.74		
1 1503 WRC Desk.....	312.45		
2 72 UBC Chairs.....	141.63		
1 1590 Table	234.19		
4 68S—BS Chairs.....	662.40		
1 8623 Ash Tray.....	12.67		
1 10 N 10 M Waste Basket.....	24.25		
1 2W Letter Tray.....	20.39		
1 19-9 Pot Cover.....	8.82		
1 1503 WRC Desk.....	312.45		
1 541 WRC Credenza.....	285.44		
2 72 UBC Chairs.....	138.31		
1 704 BC Sofa Bed.....	472.52		
1 65 ABC Chair.....	262.58		
1 2511 Table	159.80		
1 10 N 10 M Waste Basket.....	24.25		
1 2W Letter Tray.....	20.39		
9 1258 DS Chairs.....	2,946.30		
2 1255 Chairs	1,509.92		
2 544 WR Wall Cabinets.....	548.85		
1 19-12 Pot Cover.....	16.53		

**TOTAL OFFICE FURNITURE AND
FIXTURES**

\$ 69,612.45

REAL ESTATE:

Land—Durham-Raleigh Highway	
(Schedule—3)	\$ 26,604.55
Land—Lane & Person Streets	
(Schedule—4)	227,733.90
Construction in Progress—New Head-	
quarters Facility Building (Sched-	
ule—5)	\$1,000,275.94

OTHER ASSETS:

Capital Stock—State Medical Journal	
Advertising Bureau, Inc.....	200.00

TOTAL CAPITAL ASSETS—

TO EXHIBIT "A"

\$1,324,426.84

SCHEDULE—3

**SCHEDULE OF LAND COSTS—
DURHAM-RALEIGH HIGHWAY
December 31, 1971**

Options	\$ 450.00
Land Purchase—Durham-Raleigh Highway.....	24,650.00
Legal Service	126.75

FORWARDED:

SCHEDULE 2 CONTINUED:

Survey and Map of Property.....	477.80
Architect Service	400.00
Legal Fees—Re: Rezoning, Etc.....	500.00
TOTAL—TO SCHEDULE—2	\$ 26,604.55

SCHEDULE—4

**SCHEDULE OF BUILDING SITE COSTS—
PERSON AND LANE STREETS, RALEIGH
December 31, 1971**

Land Purchase—	
Person and Lane Streets, Raleigh.....	\$ 175,000.00
Legal Services	825.00
Survey and Map of Property.....	-0-
Architect Service	954.00
Appraisal Fees	200.00
Photos	69.01
Cleaning Lot	75.00
Lot—217 North Bloodworth Street.....	14,252.50
Lot—222 North Person Street.....	36,358.39
TOTAL TO SCHEDULE—2	\$ 227,733.90

SCHEDULE—5

**SCHEDULE OF CONSTRUCTION IN PROGRESS
NEW HEADQUARTERS FACILITY BUILDING
December 31, 1971**

Worthy and Company—Consulting Services..	\$ 19,504.00
J. A. Edwards—Engineering.....	699.78
Geotechnical Engineering Company—	
Soil Borings	1,143.50
Miscellaneous—	
Maps, Printing, Lot Cleaning, Etc.....	377.95
Grading Services, Inc.—	
Demolition of Buildings.....	5,000.00
G. Milton Small—Architects.....	57,216.72
Carl A. Mims—General Contractor.....	694,902.25
Stahl-Rider, Inc.—	
Heating and Air Conditioning.....	118,591.66
Bryant-Durham Electrical Contractors—	
Electrical	80,734.00
Mechanical Associates—Plumbing	21,366.87
Froehling & Robertson, Inc.—	
Structural Testing	2,763.23
Tenant Reimbursements	(2,024.00)
TOTAL CONSTRUCTION IN PROGRESS— TO SCHEDULE—2	\$1,000,275.99

ANNUAL REPORT OF THE ADMINISTRATIVE ASSISTANT

During the past year, your Administrative Assistant has participated in a wide variety of activities for the Medical Society. Assisting to coordinate the activities and working closely with sixteen committees of the Society has been a major responsibility for me. To a lesser degree yet worthy of mention is my working relationship with six other committees. The Committees of Legislation, Professional Insurance, Medical-Legal, Public Relations, Mental Health are primarily the major committees of which I have the responsibility of staffing.

The activities of the Committee on Legislation contained numerous meetings as a result of the convening of the North Carolina General Assembly. It was my responsibility to review daily the activities of the General Assembly. Of the 2,589 bills and resolutions introduced, which incidently was a new record number, 287 bills were found to be of particular importance to the Medical Society. This past session of the General Assembly was also recorded as the longest and approved the largest biennial budget. Bills of importance to the Society were obtained and appropriately distributed to various members of the Society for review and recommendation. (A report of the Society's Legislative activity was included in the October issue of the *North Carolina Medical Journal*)

Again this year it was my responsibility to coordinate various activities of the Public Relations Committee. A project of particular interest to the Committee was the provision of an educational exhibit at the North Carolina State Fair. A new project by the Committee was the organization with the cooperation of the North Carolina Hospital Association of a tri-group Medical Staff Conference. This conference held in conjunction with the Annual Leadership Conference in Pinehurst brought together statewide participants representing hospital boards of trustees, administrators, and members of medical staffs. Also, as a function of the Public Relations Committee, numerous audio-visual materials, vidio tapes, information packets for physicians, first and instruction sheets, and various other requests for information have been distributed.

Time and effort have been devoted to the preparation and distribution of the monthly *Public Relations Bulletin*. I have surveyed numerous publications in order to bring pertinent information to your attention.

I have continued in an effort to provide a coordinating effort on behalf of the North Carolina Society of Internal Medicine. This has included various mailings of newsletters, informational material at various intervals, and minutes of the Executive Council meetings to approximately 350 members. General time and effort has been devoted to NCSIM activities including telephone conversations, letter communication, and personal contacts.

Again this year I have been involved in the activities of MEDPAC. This effort continues to be an interesting and extremely rewarding activity. My attendance at the 1972 U.S. Chamber of Commerce Public Affairs Conference provided me an opportunity to meet with members of the North Carolina Congressional Delegation in Washington.

Again over the past year, I had staff responsibilities in connection with the Annual Meeting, the Committee onclave, and the Leadership Conference.

Looking back over the year, I see that my activity in connection with the Legislature was certainly the most challenging. The effort devoted to this challenge has been totally rewarding, and I see this as something of value to the Society.

Bryant D. Paris, Jr., Administrative Assistant

REPORT OF FIELD REPRESENTATIVE

During the year, your Field Representative has been involved in a wide variety of administrative duties, at the discretion of your President and the Executive Director. The major portion of my time has been devoted to duties and responsibilities enumerated, but not necessarily limited to the following:

1. Staffing approximately 15 State Society Committees, primarily dealing in the socio-economics area such as: Insurance Industry, Medicare, Peer Review, Health Care Delivery, Comprehensive Health Planning, and Medical ASPECTS OF SPORTS. The frequency of Committee meetings has varied from one to as much as four times a year.
2. Assisted in the planning and administratively supervised the Public Relations Committee sponsored "Speakers and Leadership Training Seminar."
3. Assisted in the planning and handled administrative details for the Annual Conference for Medical Leadership—formerly known as the Annual Officer's Conference.
4. Administered physician placement service.
5. On occasions, filled requests as a Speaker on socio-economic programs for County Medical Society Programs and other Health Related Organizations.
6. Did research work and responded to inquiries on a variety of subjects as assigned by the Executive Director. This involved mostly questions in the socio-economic area.
7. Did research work and responded to Public in general who made inquiries of this office concerning the quality of medical care, location of physicians and various other questions which were of a public service nature.
8. Provided administrative support for District Medical Societies on occasion.
9. Acted as liaison between State Society and its component County Societies, conveying information attitudes and trends and interpreting such to the Society Leadership and Executive Director. Occasionally made appearances on County Medical Programs relaying information on progress and activity of State Medical Society Programs. I served in the role as a resource person for County Medical Societies who desired to take advantage of it. Mostly, my field service activity is confined to the attendance of County Medical Society meetings and performing in the role as indicated previously.
10. Had several monitoring assignments of National, Regional, and State meetings on matters of importance to the medical profession. Reports of the proceedings to appropriate Medical Society officials and Executive Director were made. An example of this was my participation as a mem-

ber of a site visit team which visited California in August for a one-week period, to observe the San Joaquin Foundation for Medical Care and the Sacramento Foundation for Medical Care as well as visit a Kaiser Facility. This has led to the compilation of a great deal of information concerning Foundations for Medical Care, as a Health Care Delivery Mechanism.

I have purposely avoided being too specific, so as to avoid what may appear to be a repetition of other staff member reports, because our work is so interrelated and interdependent upon each other. The accomplishments of service to the membership have already been mentioned by your Executive Director. I would be most happy to discuss my individual contributions to these accomplishments, with any Society member at any time he may inquire.

Dan L. Mainer, Field Representative

REPORT OF THE AUXILIARY TO THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

"The Name of the Game is Commitment"

1971-1972 has been a good "Auxiliary Year," and mainly so because of the wonderful relationship between the Medical Society and the Auxiliary. Our main objective is to interpret the aims of the medical profession to other organizations interested in the promotion of health education; to assist in the entertainment at the meetings of the Medical Society; to promote friendliness among the families of the medical profession; and to do such work as may be approved from time to time by our advisory council. To qualify as a member we are "married to medicine."

Just as the community looks to the physicians as leaders, the wives are often placed in the same role. I have been proud as I traveled over the State this year to find Auxiliary members in this capacity. County, State, and National Societies and Auxiliaries are really a family affair, husband and wife working together in an organized structure for the precepts of the profession and to further health education and programs for better community health.

With our new headquarters office even a closer relationship with the Medical Society has been established. My sincere appreciation is hereby expressed for your continued support, both to me personally and to the Auxiliary in such a generous financial way.

Dr. Charles Styron, President of the Medical Society of the State of North Carolina, has been most cooperative and generous. He has always given willingly of his time and knowledge when called upon. The Auxiliary is represented by 5 members serving as consultants to Society Committees this year for which we are grateful.

The entire staff of the headquarters office has extended to me friendship, assistance, cooperation and hospitality. Mr. Hilliard, Executive Director, has been most helpful and has worked with our problems in a faithful and informative manner. Our publication *Tar Heel Tandem* is being published from headquarters office for the first time with the winter issue. This required time and planning, which was graciously given to our editor. Mrs. King has worked with our housing

plans for meetings and convention; Katherine Langdon and Patricia Paynter have been my right arms where schedules were rushed and time was short. To Harry Cope, printer, goes my special thanks. It has truly been a pleasure to work in our new office. The financial obligation for furnishings has been paid in the amount of \$1,625.70.

A special thank you to Dr. Roscoe D. McMillian as head of the Advisory Committee. We appreciate his able guidance, thoughtfulness, and his untiring efforts on our behalf.

Our theme for this year "The Name of the Game is Commitment" was brought to life by a Raleigh artist Mrs. Robert Harper, physician's wife, who designed our cover for *Guidepost*. The game is football, and the teams are Commitment and Complacency. Our component auxiliaries were urged to be action-oriented and take a firm step forward with sincere conviction that we can be leaders in health. The "banners" are our special areas of emphasis for this year—Membership, AMA-ERF, Health Manpower, Legislation, International Health, and Community Health.

AMA-ERF has continued to be the only philanthropic endeavor sponsored by the Woman's Auxiliary to the American Medical Association. At the present time there has been a substantial increase in giving with every Auxiliary contributing in some manner. The most often used method of raising funds has been from the sale of Christmas Cards, Note Paper, and Jewelry.

We are continuing our support for our Medical Schools and State Student Loan Program. Our fund was depleted because of demand at the beginning of the year. To date we have only made one loan, but have available \$3,849.17, so will be in a position to process other loans before June.

Community Health has been stressed according to the individual community needs rather than one of two state-wide projects. Programs continue on Drug Abuse, Venereal Disease, Health Careers, Mental Health, Rural Health, and Anti-Smoking Programs.

Health Manpower continued to be a very important phase of Auxiliary work. Health Careers Clubs have been formed, Health Fairs have been held, and many local Auxiliaries have their own scholarship or loan funds. There are 15 County Loan Funds and 30 County Scholarships. Alamance-Caswell County has raised over \$25,000 for scholarships with their Antique Fair—the year being their 10th Anniversary.

The Mental Health Research Endowment Fund reached its goal of \$20,000 this year with \$700 excess. The interest from this fund goes to the Department of Psychiatry at the University of North Carolina at Chapel Hill as an unrestricted fund. The amount sent this year being \$819.

Legislation has really been our shining jewel this year, and wearing the crown is our Chairman, Mr. Ledyard DeCamp. Kate has kept the interest high and the members well informed as she has traveled over the entire state. All members have been urged to be knowledgeable about proposed legislation pertaining to health and related fields. We were especially pleased to have 20 of our members invited to the reception the Medical Society had in Raleigh for the Senators and Legislators and attendance was 100%.

Our present membership is 2,528. We ask the help of the entire Medical Society to close the gap by urging

our wives to join. We have 49 component auxiliaries which includes 68 counties, organized into 10 Districts. One district, the Third is 100% organized. There are 32 unorganized counties, and efforts have been made to contact all potential members in those counties and invite them to join as Members-at-Large.

As of June 30, 1971, our 4 Sanatoria Bed Endowment Funds, Mental Health Research Endowment Fund, and Student Loan Fund totaled \$82,164. Notes receivable from our Student Loan Fund totals \$20,366, representing 42 outstanding loans.

We are so proud to have three of our members serving on a National level. Mrs. Amos Johnson is Southern Regional Vice-President. Mrs. John L. McCain is chairman of Volunteer Health Services, and Mrs. A. J. Hutchfield is Chairman of Southern Region for Health manpower. We feel it is an honor to North Carolina have these three former State Presidents represent so ably.

The Fall Conference and School of Instruction was held in Raleigh at the Medical Society Headquarters Building on September 14, 1971. Approximately 100 dedicated leaders from over the state attended and heard guest speaker, Mr. Harry Gatton, Executive Vice-President of the North Carolina Bankers Association speak. Dr. Styron brought greetings from the Medical Society, and the State P.T.A. sponsored "RISE" program was explained by the State President, Mrs. Stanley Atkins, a physician's wife from Asheville.

In October the Headquarters Building was formally dedicated. The Auxiliary was responsible for planning the reception and Past-Presidents assisted in serving.

The Mid-winter Conference for Medical Leadership held at The Carolina, Pinehurst, in January was planned with the Medical Society. Our meeting was scheduled so auxiliary members could attend as many Medical Society functions as possible, and especially hear the guest speakers from the American Medical Association.

The Auxiliary has been well represented at all National Meetings. Our full quota of 10 delegates attended the WA-AMA Meeting in Atlantic City, and I was privileged to have the opportunity to attend the House of Delegates meeting and hear President Nixon personally. All Chairmen who were invited to attend the Southern Regional Workshop in Houston were present. The president-elect and I attended the President and President-Elect Conference in Chicago in October. I have attended all District and County Auxiliary Meetings to which I have been invited, as well as representing the Auxiliary at other meetings over the State.

This has been a fun year as well as a working year, busy and gratifying year. In most areas, Auxiliaries and our wives have worked in many different projects to improve the health climate of our state. They present to the public the interest which the medical profession has in continuing good health practices to all people—good medical care without government control. Quote, "The future of medicine is in the private sector, just as the desirable future for this country is in the private sector." So we in the Auxiliary pledge anew our energy and our cooperation to serve our Medical Society to the best of our ability. Freedom is important to all members of our society, no less so for doctors.

From reports that are coming in at this time I am

sure Commitment will win over Complacency. It has been an honor and privilege to serve as President this year.

Mrs. Clifford C. Byrum (Ruby), President

REPORT OF COUNCILORS

FIRST MEDICAL DISTRICT

The First District has been represented at all Council meetings by me and there have been no particular problems in the District during the past year. We held our usual First District Post Graduate Courses in the fall this year—sponsored by the Department of Continuing Education from Chapel Hill. In addition, we recently held a co-sponsored Post Graduate Seminar on February 9 in Edenton (Regional Medical Program and Medical Society of the State of North Carolina). This was co-ordinated by the able hands of Ron W. Davis, Director of Continuing Education of RMP.

I am pleased to report that we are having more "sub-specialty" services and improved diagnostic tests available in our area which will certainly improve the delivery of health care. Many physicians are becoming aware of the need for "Peer Review" in the district and hope that the proposed plans to enlarge the district will not interfere with this function. Finally, two way radio communication is now being developed between Rescue Squads and Hospital in our area.

Increased participation of our members in functions of the State Medical Society is one of our greatest needs.

Edward G. Bond, M.D., Councilor

SECOND MEDICAL DISTRICT

I am happy to report that at the time of this report the Second District is quiet. We have experienced an increase in the number of physicians in the District in the year of 1971 and are looking forward to approximately a ten percent increase in the year 1972.

All problems presented to this Councilor have been answered, dealt with, and closed in a manner which appears to be completely satisfactory to all parties concerned.

The Annual Meeting of the Second District will be held in Greenville on February 23, 1972. The Annual Meeting for 1973 will be in Kinston on a date to be announced in the future.

In 1972 the first class will enter the East Carolina University Medical School. This District supports this school and hopes shortly to have a two-year medical school in this location. This should cause an increase in the number of physicians in this area and in general be beneficial. We feel that this will also serve to attract more physicians into the First District and to hold patients from the First District, who now seek Norfolk as their referral area, to stay within the bounds of North Carolina.

There seems to be more appreciation of the value of the Medical Society to the individual practitioner in this area and it would be a help in increasing this interest to appoint more members from this District to committees of the State Medical Society. One of the difficulties that we do experience is communication between the Medical Society and the component medical

societies. This is in part caused by the short, one-year terms which local medical society officers serve. I have wondered if increasing the term of local officers, in particular presidents of local medical societies, from the customary one year to a three year term would not improve this communication greatly and heighten interest in medical society affairs.

It has been a pleasure and a privilege to serve you on the Executive Council over the past year and we, of the Second District, greatly appreciate your efforts and the efforts of the Medical Society in our behalf.

J. B. Warren, M.D., Councilor

THIRD MEDICAL DISTRICT

I am glad to report that a happy and harmonious atmosphere prevailed throughout the Third Medical District during the past year. No specific problems arose during this time. Medicaid and Medicare appear to be working smoothly with very few complaints.

Your Councilor has attended all meetings of the Executive Council and we are looking forward to continued progress in 1972.

Frank R. Reynolds, M.D., Councilor

FOURTH MEDICAL DISTRICT

The Fourth Medical District experienced a rather quiet and benign year with no unusual happenings or undue situations.

I attended all meetings of the Executive Council.

Harry H. Weathers, M.D., Councilor

FIFTH MEDICAL DISTRICT

The Fifth District Medical Society held its annual meeting on October 6, 1971, at the Country Club of North Carolina, Pinehurst, North Carolina, with Dr. William Adair, Erwin, presiding for the Host County, Harnett.

An excellent scientific program was presented by Dr. Donald G. Vidt, Cleveland, Ohio; Dr. Albert N. Brest, Philadelphia, Pennsylvania; Dr. Wilfred Dorfman, Brooklyn, New York; and Dr. James A. Hunter, Chicago, Illinois.

Dr. Riley Jordan, Raeford, was elected President; Dr. E. Wilson Staub, Pinehurst, Secretary-Treasurer; Dr. D. E. Ward, Jr., District Councilor, and Dr. David Bruton, District Vice-Councilor.

There were no special problems in the Fifth District during the past year and congratulations to each county society president who has done such a fine job during the year.

D. E. Ward, Jr., M.D., Councilor

SIXTH MEDICAL DISTRICT

In January 1972, the State Medical Society, Regional Medical Program, and Continuing Education Department of Duke Medical Center presented a scientific program at the Teer House in Durham for the members of the Sixth Medical District. Ron Davis, Ed.D., of Regional Medical Program and Dr. William DeMaria of Duke Medical Center cooperated in the development

of the program which was well presented by members of the Duke Faculty and enjoyed by those present.

There were no unusual problems brought to the attention of this Councilor and all meetings of the Executive Council of the Medical Society were attended by this Councilor.

John W. Watson, M.D., Councilor

SEVENTH MEDICAL DISTRICT

This Councilor has attended all of the meetings of the Executive Council and enjoyed the association with other members of the Council. This District has had no serious problems and shares with other areas of the State the challenging issues to the practice in medicine as they present themselves. Since the complexities of medicine are becoming statewide and nationwide the physicians of this state are becoming more unified and the individual perplexities become less meddlesome. This Councilor has always chosen to participate as little as possible in the individual problems of other physicians.

Charles L. Stuckey, M.D., Councilor

EIGHTH MEDICAL DISTRICT

The Councilor attended all meetings of the Executive Council during the past year. The Vice-Councilor attended one meeting of the Executive Council.

One physician in the District was investigated at the request of the North Carolina Board of Medical Examiners.

One physician in the District was investigated because of alleged unethical conduct. This case was handled at the county level with apparent satisfactory results to date.

One half-day program was given in the District under the auspices of the Continuing Education Program of the Regional Medical Program.

Thornton R. Cleek, M.D., Councilor

NINTH MEDICAL DISTRICT

There have been no unusual happenings reported to the Councilor in the Ninth District this year. Councilor was called upon during the year to attend one special meeting and one regular meeting of the Insurance Industry Committee relative to Medicare claims submitted by physicians in the Ninth Medical District.

The Councilor has attended all meetings of the Executive Council.

J. H. Cutchin, Jr., M.D., Councilor

TENTH MEDICAL DISTRICT

The Tenth Medical District of the Medical Society of the State of North Carolina has had a relatively good year.

The only major problem has been the illness of Councilor.

Following re-activation of the Tenth District meeting in March of 1971, a similar meeting was held in Asheville in March of 1972. The meeting, again, was primarily socio-economic.

The State of Franklin is actively working on projects

to bring new physicians into the physician depleted areas of Graham, Clay, Cherokee and Swain counties. All Executive Council meetings have been attended by either the Councilor or Vice-Councilor.

A. T. Pagter, Jr., M.D., Vice-Councilor

REPORT OF COMMISSIONS

ADMINISTRATION COMMISSION

The four committees under the Administration Commission have met and carried out their obligations for the year 1971-1972.

The headquarters building has been completely occupied except for a small area which is really needed by the Society for storage. It appears that rental income will probably cover the operating expense of the building.

Efforts to sell the Highway 70 property continue with no imminent prospects at the time of this writing. Success in the attempt to add a second field representative to the headquarters staff will enable the Society to sell more secretarial and accounting and administrative services to the specialty societies resulting in tying them more closely to the Society.

The Committee on Professional Insurance and the North Carolina Retirement Savings Plan Committee have met regularly and functioned well.

T. Tilghman Herring, M.D., Commissioner

ADVISORY AND STUDY COMMISSION

The activities of the committees under the Advisory and Study Commission are in the individual reports of these Committees and we will not attempt to go into specific activities in detail.

Committee on AMAERF under Jack Tannenbaum has developed several new ideas for fund raising.

Committee on Anesthesia Study has been very active under Albert A. Bechtoldt, Jr., and has been especially active in coordinating such studies with the Medical Examiner System Reports.

Committee Advisory to Auxiliary and Archives of History has maintained excellent liaison with the Auxiliary and anticipates publication in October of 1972 of the long awaited *History of Medicine in North Carolina*.

Committee on Cancer has continued its usual activities but has undertaken no new work during the year.

Committee on Constitution and Bylaws has received a number of referrals from the Executive Council regarding changes in the Constitution and Bylaws and continues to work on an overall revision of the Constitution and Bylaws.

Committee on Medical Education has continued to explore avenues of possible activity but has been largely hindered by absence of adequate funds.

Committee Advisory to the North Carolina Department of Motor Vehicles continues its very active liaison with the Department of Motor Vehicles, including activities in connection with the Research Triangle program and consideration of possible revisions concerning usual requirements for driver licensing.

Committee of Physicians on Nursing has, in part, referred some of its activities to a new joint practice committee of the North Carolina State Nurses Association and the Medical Society, the joint practice com-

mittee being committed to some of the same objectives previously outlined by the Committee of Physicians on Nursing for the improvement of Nursing Education in the State of North Carolina.

Committee on Relative Value Study continues with its preparation of a new relative value schedule for the State.

Committee Advisory to Student AMA Chapters in North Carolina did not meet last fall but does continue its support of student activities and promotion of student membership in the State Society.

I would like to express my appreciation to the individual chairmen and to all of the committee members who have participated in the activities of this Commission during the past year.

Roy S. Bigham, Jr., M.D., Commissioner

ANNUAL CONVENTION COMMISSION

Committee on Scientific Works:

Did not meet at the Committee Conclave. Chairman Arthur Davis will submit his report of plans made for the Annual Meeting.

Committee on Arrangements:

Was well attended at the Committee Conclave. The following facts were noted:

1. Ownership and management of The Carolina changed when Pinehurst, Inc. was acquired by Diamondhead Corporation. As a consequence, at the Annual Meeting:
 - a. the basement area, formerly used for technical exhibits is no longer available.
 - b. technical exhibits will be shown in the South Room, the corridor between the North and South Rooms and the Dogwood Room.
 - c. We can accommodate only two-thirds our usual quota of technical exhibits and will lose one-third of our usual expected receipts from same.
 - d. recommended that strenuous efforts be made to find another convention site.
2. Recommended that the Annual Meeting be changed to a Thursday through Sunday meeting.
3. Recommended that the transportation for medical students to the Annual Meeting be discontinued because they did not avail themselves of the opportunity and the Society need not go to this expense.

Committee on Necrology:

The meeting at the Committee Conclave was attended only by the Chairman, Dr. Otis Duck, the Commissioner and the recorder, Dr. Duck felt that the format for the Memorial Services should be the same as in 1971.

Committee on Scientific Exhibits:

Please refer to Annual Report of Chairman.

Committee on Awards:

Chairman Patterson reported that the 1971 award winners had been determined. See the report of the Committee on Awards for complete details.

Committee on Audio-Visual Postgraduate Instruction:

Dr. John Grier, Chairman, reported he had secured films on timely subjects for the Annual Meeting.

Committee on Credentials:

This Committee functions during the Annual Meeting by receiving and certifying delegates as they report for seating in the House of Delegates.

Josephine E. Newell, M.D., Commissioner

PROFESSIONAL SERVICE COMMISSION

All of the committees of the Professional Service Commission met at the Mid Pines Conclave in September, 1971. All eight committees were well represented, met on schedule, and accomplished a great deal, and their detailed reports are recorded in the Compilation of Annual Reports. The recent enlargement of the Blue Shield committee has not hampered its excellent work, and the sub-committee has continued its adjudication functions, under the guidance and leadership of Dr. James Davis. The new ambulatory surgical unit at Watts Hospital in Durham was favorably discussed. Studies on fees for the Anesthesiologist and the Radiotherapist are in progress. Periodic meetings of the Blue Shield Committee and the sub-committee are continuing. The Committee on Professional Relations and Liaison to N. C. Hospital Association endorsed the co-sponsorship of a workshop on new standards of the J.C.A.H. The Committee to Work With North Carolina Industrial Commission requested that the usual and customary fees be authorized by the N. C. Industrial Commission and that the Fee Schedule be abandoned. The Insurance Industry Committee has met periodically for consideration of claims and clarification of practices and principles concerning relationship with the Insurance Industry. The Insurance Industry Committee considered the question of how the new State Society Peer Review Committee would relate to the ongoing review now being done by its own claims review service. The periodic meetings of this excellent committee make its work continuous and accumulative. The Committee on CHAMPUS heard a progress report for N. C. Blue Cross and Blue Shield regarding new benefits provided under the program, such as educational services, plastic and cosmetic surgery, and spontaneous abortions, new CHAMPUS philosophies, such as timely payments, education of providers and beneficiaries, increased physicians participation, and a step-up of utilization review, along with further thoughts on N. C. Blue Cross and Blue Shield determination and payment of U.C.R., and considered some aspects of Cost Containment, and utilization review. The Committee on Physical and Vocational Rehabilitation moved that the membership be requested to make nominations for the Governor's Award for Handicapped Physician of the Year. The Advisory Committee To The Crippled Children's Program moved for approval of the proposed requirements for appointment of physicians as participants in the Crippled Children's Program as prepared by the N. C. State Board of Health, and that information regarding Rostering of Physicians be disseminated. The Ad Hoc Committee on Third Party Payors has met several times and considerable discussion has let to further study thought, and subsequent meetings have been scheduled in an effort to arrive at a proper perspective.

At the Conference for Medical Leadership on 29 January 1972, at Pinehurst, a panel discussion on "Medical Evaluation—Our Hope For the Future," a four

participant panel included Drs. Wansker, Davis, and Mitchener, of the Professional Service Commission.

The meeting of the Committee on Finance was attended on 11 September 1971, and this was an enlightening experience.

The committee chairmen and members of this Commission have been found to be able, reliable, courteous, and cooperative, and such characteristics are greatly appreciated.

W. Howard Wilson, M.D., Commissioner

PUBLIC RELATIONS COMMISSION

All the committees of the PUBLIC RELATIONS COMMISSION met in Pinehurst during the Committee Conclave in September 1971. Several of the committees have met since then. Each of the committee meetings was well attended and productive, as indicated by the reports of the committee chairmen listed separately. Some of the reports from the committees presented to the Executive Council are outlined below:

Medical-Legal Committee:

Julius A. Howell, M.D., Chairman—A revised version of the Medical Legal Code was approved for distribution.

Eye Care And Eye Bank:

Paul McB. Abernethy, M.D., Chairman—Considered the dangers for fitting soft lenses by improperly trained and unauthorized practitioners. Recommendations in this regard were made to the Executive Council.

Committee Liaison To N.C. Pharmaceutical Association:

Charles W. Byrd, M.D., Chairman—Reviewed the program of physicians dispensing medications under Medicaid. It was brought to the attention of the Committee that abuses have occurred on several occasions. The committee requested that the names of these abusers be brought to the attention of the Committee Chairman and also passed on to the Peer Review Committee of the Medical Society. The Committee also recommended that the Executive Council support the proposal of the Department of Social Services for the pharmacy reimbursement program for utilization control.

Public Relations Committee:

John L. McCain, M.D., Chairman—conducted medical leadership Seminar (Josephine Melchior, M.D., Program Coordinator); sponsored a Conference for Medical Leadership; served to facilitate and assist in conducting a Joint Conference for Hospital Trustees, Administrators and Hospital Medical Staff on January 28, 1972, immediately preceding the Medical Leadership Conference; initiated a "health news tip" public education service and distribute with the help of the Auxiliary, two of the posters of the AMA Communications PR program. The Chairman made a talk at the Conference for Medical Leadership to encourage activation of the county medical society PR programs.

Committee On Disaster and Community Medical Care:

George A. Watson, M.D., Chairman—undertook planning for a coordinated program of recommenda-

tions to the Executive Council of the Medical Society and to the Legislative Research Commission to improve emergency room services.

Committee On Legislation:

Edgar T. Beddingfield, Jr., M.D., Chairman—reviewed the legislative proposals under consideration at the state and national levels and made detailed recommendations to the Executive Council. Dr. Beddingfield also spoke at the Conference for Medical Leadership on activities of the Legislative Committee encouraging development of active county medical society legislative committees.

Committee On Association of Professions:

Thomas G. Thurston, M.D., Chairman—recommended increased physician membership in the Association of Professions.

Community Medical Care Committee:

J. Kempton Jones, M.D., Chairman—recommended increased affiliation of the medical schools in North Carolina with physicians in practice. Encouragement was given to the recommendation for the Medical Society for development of a medical foundation in North Carolina.

For detailed accounts of committee deliberations, please refer to the respective committee reports.

I would like to commend the committee chairmen and the headquarters staff for the excellent service performed and leadership given in the activities of the Public Relations Commission.

With the opening of the new Headquarters Building, I believe that this has been perhaps the most effective public relations improvement for the Medical Society. The Dedication of the building and Open House was held on October 10, 1971 to which many notables were invited, including Governor Robert W. Scott. And, on October 28, 1971 a social hour for legislators was held which was very well received. Without doubt, the opening of the headquarters facility has been the big public relations accomplishment for 1971-72.

John L. McCain, M.D., Commissioner

PUBLIC SERVICE COMMISSION

The committees in the Public Service Commission have been active this past year with special projects in several of the committees. At the conclave of committees in September, 1971, each committee was represented by a formal meeting or by a report.

The Committee on Maternal Health presented a therapeutic abortion report form which was approved by the Executive Council. This committee recommended that educational material in regard to the North Carolina Abortion Law be mailed to the Society membership.

The Committee on Child Health noted that recent legislation was enacted that requires immunization by tubercle vaccine before attaining the age of two years. This committee requested that the changes in the Child Abuse Law as made in the 1971 legislation be published in the public relations bulletin.

The Committee on Marriage Counseling and Family Life Education has initiated an inquiry to the administrators or student leaders of several college campuses in

regard to the need for family life education and sex education. Dr. Easley will elaborate more about this project in the committee report.

The Committee on Medical Aspects of Sports has generated a great deal of interest in this field, both at the state administrative level as well as in the medical profession. Plans are being made for a Governors conference on Medical Aspects of Sports as requested by Governor Scott. More details of this will be given in the committee report.

The Committee on Medicine and Religion is making plans for more participation at the state level at the May meeting of the North Carolina Medical Society.

The Committee on Mental Health has been very active and have been consulted in regard to some of the problems of the state institutions under the supervision of the State Board of Mental Health.

The Committee on Chronic Illness among other things gave an interesting report on the home health nursing program as sponsored by the North Carolina State Board of Health.

The Committee on Drug Abuse was given a report by Mr. Roy Epps acting director of the Drug Authority with some explanation of the Uniform Drug Act of the state of North Carolina which became effective January 1, 1972. This committee expects to have available a proposed statement of policy in the near future. A resolution from the Mecklenburg County Medical Society which decried the prescribing of amphetamines was presented and sent to the Executive Council.

The Committee on Occupational and Environmental Health is keenly interested in the feasibility of an Industrial Health Clinic in the Greensboro-High Point area and is gathering some information and background material necessary for the establishment of such a clinic. Dr. John Brockmann presented this concept to the Executive Council in January, 1972. The need for increased information and recognition of the National Health Safety Act by the medical profession was also emphasized.

The full cooperation of the headquarters staff is gratefully acknowledged in the successful operation of the committees.

Rose Pully, M.D., Commissioner

DEVELOPING GOVERNMENT HEALTH PROGRAMS COMMISSION

With the exception of the Regional Medical Program Advisory Group each of the six other Committees under this Commission met during the September Conclave held in Southern Pines. Some of these found it necessary to have additional meetings for the consideration of matters involving their scope, function and purpose. On the whole attendance was good and it appears that the conclave affords a good mechanism to encourage attendance, and at the same time is conducive to work.

The Committees and their Chairman currently under this Commission are:

1. Committee on Comprehensive Health Service Planning. Frank W. Jones, M.D., Chairman
2. Committee on Medicare. Charles H. Reid, Jr., M.D., Chairman
3. Committee on Peer Review. John Glasson, M.D., Chairman

4. Regional Medical Program, Advisory Group
5. Committee on Social Service Programs, Charles B. Wilkerson, Jr., M.D., Chairman
6. Utilization Committee, H. Fleming Fuller, M.D., Chairman
7. Committee on Health Care Delivery, Patrick D. Kenan, M.D., Chairman

The activities of each of these Committees is contained in reports submitted by the chairmen and is to be found in the Compilation of Reports. The Regional Advisory Group of The Regional Medical Program contains eight members of the Medical Society. As a member of that Group this Commissioner has an ongoing opportunity to know of its activities.

A significant change in the organizational structure of RMP has been accomplished. Beforehand the Association for the North Carolina Regional Medical Program had an Advisory Council and a Board of Directors. The Group with constituted authority and supervisory powers was indefinite and made for confusion. Reorganization has been accomplished which conforms to national guidelines and makes for smoother and more efficient operation. Currently there is the Regional Advisory Group representing both lay and professional disciplines in a broad manner. An Executive Committee of twelve members is delegated respon-

sibility to carry out the functions of the Program and conduct such business as is appropriate. The RAG meets quarterly and the Executive Committee meets monthly and more often if necessary.

The Administration (Nixon) has given RMP new life as a high priority program. Last year the Administration outlined plans to spend only \$87 million for RMP during fiscal year 1972. But plans now call for an expenditure of nearly \$143 million by June 30, with another \$130.2 million projected for fiscal 1973.

When White House officials decided to give health a big boost up the domestic priorities totem pole, the HEW officials pointed out that RMP offered a ready mechanism to achieve results. Since then, RMP has provided a vehicle for new emergency medical service initiatives, health education centers activities and even Health Maintenance Organization development. Our program in North Carolina is the recipient of reasonable funding and is expanding innovative programs across the state. Our program has been one of orderly development and deserves its recognition as one of the better programs in the United States. The Medical Society's support has made our status possible. Its continued support is essential in improving our system of health care delivery.

George W. Paschal, Jr., M.D., Chairman

REPORTS OF COMMITTEES

COMMITTEE ON AMA-ERF

A. J. Tannenbaum, M.D., Chairman
(Report not received as of 4-6-72)

COMMITTEE ON ANESTHESIA STUDY

In 1971, legislation was passed making all deaths in the operating room reportable to the Medical Examiner, directly stated under the provision of unusual deaths. Although not a statutory law, it is nonetheless MANDATORY THAT A DEATH IN THE OPERATING ROOM BE REPORTED TO THE MEDICAL EXAMINER. (The Medical Examiner System in the State now encompasses 80 counties while the other 20 are served by coroners.) Dr. Page Hudson, Chief Medical Examiner, has been very active disseminating this information.

Until this new reporting system is established, including evaluation of the Medical Examiner reports for adequate information, the Committee will use both the new and old systems. Once established, the new system should produce a more accurate and complete study of anesthetic deaths in this State. Although limited to the operating room, it should produce more valuable information.

At the Anesthesia Study Committee meeting at the Annual Committee Conclave at Mid Pines on September 24, 1971, the Committee considered cases involving anesthesia deaths for the year 1970. There were 112 questionnaires sent out with a 70% reply rate. Anesthesia played no part in all but possibly 7 of these.

There were two deaths after the induction of anesthesia and prior to surgery, giving anesthesia a major role in each death. A third patient had a cardiac arrest of unknown etiology, and subsequent death, at the termination of surgery. A fourth patient had a myocardial infarction just prior to or during anesthesia

with hypotension during surgery and death in the recovery room. Two more patients died shortly after operation in which anesthesia, surgery, and prior condition probably all contributed, although information was insufficient. The seventh death had only a possible anesthetic relationship.

These seven deaths occurred in hospitals of various sizes and capabilities; all anesthetics were given by nurse anesthetists. Four of these anesthetics were elective and in excellent to fair health, and three were emergency and in poor health. Their ages ranged from 2 to 61, with an average age of 40. No statistical analysis can be given, however, as the number of cases is too small and information is incomplete.

Albert A. Bechtoldt, Jr., M.D., Chairman

COMMITTEE ON ARRANGEMENTS

The Committee on Arrangements met in Southern Pines on September 23, 1971, at which time the arrangements for the 1972 annual meeting were made. Despite some inconvenience related to reduced exhibit space, the arrangements appeared to be satisfactory. Future meetings are to be planned for The Carolina through 1977. A decision to consider a meeting time from Thursday through Sunday, instead of Sunday through Wednesday, beginning in 1974, was made. Specialty organizations were urged to plan their annual meetings, when possible, to overlap with the Annual Meeting of the Medical Society.

E. Harvey Estes, Jr., M.D., Chairman

COMMITTEE ON ASSOCIATION OF THE PROFESSIONS

This past year has been a very active one for the North Carolina Association of Professions. The Chairman of your committee has also been the President of

the Association of Professions. The highlights of activity areas follows: (1) Active participation and cooperation incident to the various legislative matters involved with the 71 State Legislature Session. (2) Continuing action involving all of the Professions in cooperation with the Miller Clinic and their legal firm in seeking repeal of the Intangible Tax on uncollected Professional Accounts. (3) Further progress in stimulating formation of an Association of the Professions for South Carolina which has reached the point that each one of their Professions have nominated key members who are now meeting together leading to drawing up their articles of incorporation. (4) Prior to this year the State Medical Society was the only member Profession that had a specific committee for the Association of Professions. During the year all of the other Professions have been stimulated to form such committees. (5) One of the goals of the year is beginning to be achieved, namely the formation of Regional Chapters of the Association of the Professions; one each for the West and the East and one for the Piedmont areas. (6) Our Business Practices Committee has been very active up to the minute bulletin, particularly for those Professionals who have become incorporated and related to the phase one and phase two Government Regulations.

The Business Practice Committee is in the middle of negotiations with the Southern National Bank of Lumberton setting up a very attractive retirement income program for members of the Association of the Professions which is much more liberal and gives more freedom of choice than any other Bank will provide.

At our annual meeting in February, 1971, the major guest speaker gave a brilliant summary of the status of the Environmental Protection Agency centered in the Research Triangle. At the annual meeting coming up in March, 1972, Mr. Lanier of the State Insurance Commission will be the main speaker on the subject of "No Fault" Insurance. At a meeting of the Board of Directors in the fall at Hound Ears Lodge near Boone, North Carolina, a Representative of the State Board of Higher Education gave a detailed summary of the then very controversial subject of Consolidation of the Universities of North Carolina.

Your Chairman was invited to give talks as to the activity of the Association of the Professions at the North Carolina Veterinary Society Annual Convention. He was also the guest of the North Carolina State Dental Society at the time of their Annual Convention. A talk was also given on the same subject to the Lion's Club of Asheville.

The involvement and cooperation of all M.D.'s is still encouraged and being promoted in behalf of the Association of Professions.

George G. Gilbert, M.D., Chairman

COMMITTEE ON POSTGRADUATE AUDIO-VISUAL INSTRUCTION

The Committee on Postgraduate Audio-Visual Instruction met on September 24, 1971, at Mid Pines, Southern Pines, North Carolina.

The Audio-Visual program for the 118th Annual Session of the Medical Society of the State of North Carolina, scheduled for May 20-24, 1972, The Carolina, Pinehurst, North Carolina, was discussed and planned.

The final audio-visual program for the 1972 meeting is recorded in the program for the Annual Sessions and was distributed with the April 1972 issue of the Public Relations Bulletin.

J. C. Grier, Jr., M.D., Chairman

COMMITTEE ADVISORY TO THE AUXILIARY AND ARCHIVES OF MEDICAL SOCIETY HISTORY

Advisory To Auxiliary

Mrs. C. C. Byrum, President of the Auxiliary for 1971-1972, used for her theme, "The Name of the Game is Commitment". . . She and other members of the Auxiliary have really shown themselves to be committed through the projects they undertook during the year. Some of these projects were: Health Manpower, Health Education, Legislation, and Community Health Activities. Also, much effort has been focused on:

- I. Membership — Much has been done to recruit new members. Mrs. Byrum has encouraged members of the Auxiliary to fill the gap of approximately 1,000 doctor's wives who are potential members. Her emphasis on friendliness, communication and education through good programs is certain to show positive results.
- II. AMA-ERF—There has been much accomplished in this field and the Auxiliary has played a great part in this by raising almost 5 million dollars. The Auxiliary is to be commended for the many hours of hard work that went into making this possible.
- III. Student Loan Fund—This fund, used for emergency needs of medical students, continues to help very deserving junior or senior medical students further their education. The loans are for \$500 a year.
- IV. Sanatoria Beds: Cooper, McCain, Stevens, and Yoder—The personal contact made with the occupants of these beds is a fine example of Auxiliary public relations.

It seems there is so little time or space in which to enumerate all the wonderful things undertaken and accomplished by the Auxiliary; therefore I encourage all of you who have access to the Auxiliary's GUIDE POSTS to take time out to read it, and also read the President's annual report in order to understand the importance and scope of the work done by the Auxiliary. It is gratifying to note the interest, skill and hard work that goes into the year's plans and read the results or as our President, Mrs. Byrum, might say, the *score* at the end of the year.

To the ladies of the Auxiliary, I would like to extend a most sincere THANK YOU for the support you have given the Medical Society. Through your loyal service and efforts great things have happened and continue to happen in the medical profession.

Archives of Medical Society History

It gives me great pleasure, at this time, to be able to give a favorable report on MEDICINE IN NORTH CAROLINA because things have really been progressing since February, 1971. All essays have been completed, handed from an expert reader to copy editor, and then finally to the University of North Carolina

Press. If all goes well, we will be able to see our finished product October, 1972, a dream fulfilled.

At the time of my last report the Medical Society was helping to undertake mailing prepublication order blanks to physicians, schools, public, college, and medical libraries in order to estimate how much of the expenses the Medical Society would have to "foot." Although, the orders are slow in coming, I feel we have done a good job.

Whenever a single order comes in the money is placed on regular checking until we have \$50, then it is transferred to Golden Passbook Savings. This way it will be earning interest. We now have \$8,858.52 toward covering the cost of publication.

I urge those of you who have not placed your order to do so before September, 1972 in order to get the prepublication price of \$24.25 for the two volume set. This will also assist the Medical Society Office in determining how much, if any, the Society's part of the expense of publication will be.

Roscoe D. McMillan, M.D., Chairman

COMMITTEE ON BLUE SHIELD

The Blue Shield Committee held four regularly scheduled meetings during 1971. The time and place of each meeting was announced to the entire Society membership well in advance, and it was made clear that any member was welcome to present matters for Committee consideration.

During last year's meetings a variety of subjects were discussed, actions taken, and reports given. Specialty members, acting as a liaison between the Committee and specialty groups, presented problems involving new or unusual services and the Corporation's approach to providing benefits for them. These problems, such as establishing benefits for radiotherapy planning and new thoracic surgical procedures, were resolved in ways which were satisfactory to the Committee and the Corporation. Reports were given by Committee members on important developments in health care and prepayment, such as the effect of automation on pathology. In addition, guest speakers from Blue Cross and Blue Shield spoke about activities in such areas as usual, customary, and reasonable benefits and utilization review. Committee activities have contributed to Blue Shield policy decisions and maintained effective communication between the Corporation and the Medical Society.

The responsibility of serving as the Claims Review Subcommittee was delegated to six members. Currently, the six members are Doctors Ashe, Bullard, Davis, Hudson, Johnston, and Whitaker. During the eleven meetings, approximately 275 cases were formally adjudicated, and issues from which important precedents, schedule modifications and general guidelines relating to charges and the customary medical practice would emerge were referred to the full committee for final determination. Claims were reviewed at the request of individual physicians or the Corporation when there was a question about the type and amount of benefits applicable or when a procedure or service was provided for which benefits had not been established. Subcommittee members have frequently contacted committee consultants and specialists on an advisory basis when specialized knowledge was needed.

Committee members and consultants have given freely of their time serving as advisors in problems relating to their specialty. There have been approximately 1,500 communications with the Corporation about customary medical care and Blue Shield professional benefits.

Members of the Committee have encountered and appreciated some of the problems of North Carolina Blue Cross and Blue Shield and the importance of the efficient delivery and adequate funding of health services in North Carolina.

North Carolina Blue Cross and Blue Shield has been cooperative at all times and the Committee is grateful for the active support of Committee functions by Mr. J. A. McMahon, President; Mr. K. G. Beeston, Vice President of Blue Shield Activities; and his entire staff.

The Committee is appreciative of the interest and participation of Dr. Charles W. Styron, President; Dr. John Glasson, President-Elect; Dr. W. Howard Wilson, Commissioner; and Mr. William N. Hilliard, Executive Director of the Medical Society of the State of North Carolina.

James E. Davis, M.D., Chairman

REPORT OF PHYSICIAN TRUSTEES TO NORTH CAROLINA STATE MEDICAL SOCIETY

The year 1971 was indeed a very busy one for North Carolina Blue Cross and Blue Shield. There was an increase in earned fees of 27% over the previous year but also an increase in claims incurred slightly over 27%. Claims paid to subscribers was 98.2% of all income. Administrative expense was reduced from 7.8% in 1970 to 6.5% in 1971. Reduction of this administrative expense is certainly a tribute to the management of NCBCBS. However, as is readily apparent the Corporation sustained a loss for the fiscal year. The trustees and management have devoted much time and attention toward the end of erasing this loss for fiscal 1972.

The rapidly changing social, economic, and political atmosphere, and the impact of Phase I and Phase II of the President's Economic Program, created many problems in establishing utilization trends, cost estimates, and rate estimates. Many steps have been taken so that the Corporation may react more speedily to these changes and reduce the loss ratio. The physician members of the Board of Trustees have attended all Board meetings and at least one physician has been a member of every committee of the Board. The cooperation and harmony within the Board has been excellent. Construction of the new headquarters facility for the Corporation is proceeding on schedule and we anticipate that the consolidation of the many offices of the Corporation now scattered in several locations will not only reduce administrative expense but allow for quicker and more efficient service to our subscribers. By the end of 1971, 655,447 certificates were in force, an increase from 606,487 the previous year. A total of 1,552,106 persons was covered under these certificates. The Physician Trustees have endeavored to bring the problems and the expertise of the medical provider to the Board and to management to guide both in its activities. They have been afforded every opportunity to represent their views and the views of the Medical Society, and have received utmost cooperation from

other members of the Board as well as from management.

We were particularly pleased that Blue Cross participated in the Outpatient Surgical Experiment conducted by Doctor James Davis at Watts Hospital and had some part in responsibility for this experiment. The Board has been especially pleased to have Doctor John Glasson, the President-elect and Doctor James Davis, the Chairman of the Blue Shield Committee, attend the Board meetings and take part in its deliberations.

M. N. Lymberis, Alfred Hamilton, K. D. Weeks
Fleming Fuller, Roy Bigham, Ted Blount
Robert Crouch, Joe Stevens

COMMITTEE ON CANCER

In regular meeting September 23, 1971, the Committee heard reports from the North Carolina Cancer Institute, the North Carolina Division of the American Cancer Society, The State Board of Health, Regional Medical Program and the Central Cancer Registry. A motion was passed excluding pathologists in hospitals which participate in the Central Cancer Registry from the requirement of reporting cancer cases seen in their hospitals. They will, however, continue to be responsible for reporting cases they discover occurring in outpatients.

Of particular importance among the reports was the statement by Mr. Thomas Vitaglione that the Registry Data Bank is now operational and available to physicians interested in patient care and research.

Dr. Isa Grant of the State Board of Health showed statistical information about cancer incidence in North Carolina. Cancer of the lung in males has increased as has cancer of the breast with a slight decrease in cancer of the cervix. She also reported on cancer detection and diagnostic clinics and the findings of new multiphasic screening clinics including the comparative cost of these clinics.

Other inquiry by the Committee found the North Carolina Cancer Institute thriving with an average census of 44 patients and a cooperative effort under way by Regional Medical Programs, American Cancer Society and others to prepare a resource booklet for all individuals interested in the field of cancer.

Lewis S. Thorp, M.D., Chairman

COMMITTEE ON CHILD HEALTH AND INFECTIOUS DISEASE

At the Committee Conclave held at Pinehurst on September 24, 1971, an attempt was made by the Child Health Committee to bring together any group interested in promoting the welfare of children. At the advice of the Infectious Disease sections of the three medical schools and the North Carolina State Health Department, a very positive stand was taken concerning German Measles immunization. This was reported to the members of the North Carolina Medical Society and publicized to them.

Dr. George Brumley, Neonatology Department of Pediatrics, Duke Hospital, reported the findings of his committee sponsored by the North Carolina Pediatric Society and the American Academy of Pediatrics sec-

tion of the North Carolina Pediatric Society on efforts to improve premature care. His group was encouraged to continue their efforts and to rest assured that this committee would cooperate in any way possible.

The committee encouraged Dr. John King of the State Board of Health to continue his efforts to train more nurse assistants in an effort to provide better use for the practicing pediatrician's time.

At the present time efforts are being made with the State Health Department and the Institute of Government at the University of North Carolina to draft a law to place immunization requirements with the North Carolina State Board of Health rather than with the Legislature. By doing this it would be easier to respond to changes in immunization practice which arise from time to time. It has proven very cumbersome in the past to respond to these changes when the General Assembly meets every other year.

Efforts are being made at this time to work very closely with the North Carolina Pediatric Society and the North Carolina Chapter of the American Academy of Pediatrics in all areas of child health. A very positive approach to this end is forthcoming in the fact that the North Carolina Chapter of the American Academy of Pediatrics is helping to provide funds for our section meeting in May during the Annual Meeting of the Medical Society.

We do not anticipate asking the State Medical Society for any special funds for this committee for the forthcoming year.

David T. Tayloe, M.D., Chairman

COMMITTEE ON CHAMPUS

The scope of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) was expanded through legislation effective January 1, 1967. The legislation provided a program of inpatient and outpatient civilian health care for retired military families and the dependents of deceased military personnel and also provided more comprehensive benefits for active duty dependents. As a result of this legislation and the education of providers and beneficiaries by CHAMPUS, the program again grew during 1971. This was evidenced by a comparison of the number of physicians' claims paid during the year 1970 and 1971.

Since February 1, 1968, the program has continued to be administered on a usual, customary and reasonable concept as contracted between North Carolina Blue Cross and Blue Shield, Inc., and the office for the Civilian Health and Medical Program of the Uniformed Services. Previous action and recommendation by our Committee led the Council to endorse Blue Shield as the continuing fiscal intermediary. Our Committee was also authorized to provide supervision for the adjudication of claim and to give advice and counsel in other professional matters as requested by Blue Shield. A claims review subcommittee, composed of seven physicians of representative specialties, was appointed to work with Blue Shield for the establishment of criteria and patterns of usual, customary and reasonable reimbursements.

The Committee and claims review subcommittee have held meetings as needed. The chairman and members have also consulted frequently with one another by phone and letters. Thus, cases of an unusual and com-

plex nature were considered to the mutual satisfaction of those concerned.

The usual, customary and reasonable concept, as administered under the CHAMPUS, has continued to be widely accepted by North Carolina physicians with few complaints. However, physicians not desiring to accept assignment, nor wanting to be subject to the usual and customary allowance determinations, are privileged to reimburse the patient in an amount not to exceed that which would have been paid by physicians.

Present trends indicate a reduction in the population of dependents of active duty servicemen. However, the number of retired military personnel and dependents will likely increase. More important, however, is that the armed services plan a reduction in the number of active duty physicians who will necessarily concentrate their attention on treatment and rehabilitation of servicemen. Therefore, it appears that care of dependents and retired military will increasingly be the responsibility of our private practitioners and community hospitals.

The Annual Report of the Fiscal Administrator—North Carolina Blue Cross and Blue Shield, Inc.—is herewith printed and incorporated as a part of the Committee Report. This report shows comparative statistics for the past two years and indicates that during the past fifteen years a total of \$50,573,777 has been paid to North Carolina physicians, hospitals and other providers of care—a significant factor in support of free choice of community hospitals and physicians. This report is as follows:

TO: Committee on Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) of the Medical Society of the State of North Carolina

North Carolina Blue Cross and Blue Shield, Inc. has completed its fifteenth year as fiscal administrator for reimbursement of physicians for care under CHAMPUS. During the period 1957 through 1971, \$20,178,742 has been paid to North Carolina physicians for 215,761 cases reported. Comparative statistics for physicians' payments for the years 1970 and 1971 are as follows:

	1970	1971
Paid to Physicians	\$2,370,005	\$2,710,103*
Number of Cases	20,086	20,980
Average Amount Paid Per Claim	117.99	129.17

Due to the continuing education of eligible persons and more comprehensive benefits under the inpatient and outpatient program, there has been a continued increase in the number of claims paid in 1971 as compared to those paid in 1970.

Nationwide, the CHAMPUS Program, which encompasses more than six million beneficiaries, expended some \$386 million in 1971. The North Carolina Blue Cross and Blue Shield CHAMPUS program paid \$9,376,420 to physicians, hospitals and other providers of care during this year.

Under a separate contract with the Blue Cross Association, the Corporation reimburses hospitals for authorized civilian care provided beneficiaries by the CHAMPUS Program. From 1957 through 1971, \$28,090,088 was paid to North Carolina hospitals for 158,300 claims. The total paid to all providers since 1957 is \$50,573,777 for 421,465 claims.

*Does not include \$997,075 for 16,906 cases paid to beneficiaries under the outpatient and handicap programs.

We wish to express our sincere appreciation and gratitude to the CHAMPUS Committee and Claims Review Sub-Committee; its chairman, James H. Manly, Jr., M.D.; and to Mr. William N. Hilliard, Executive Director of the Medical Society of the State of North Carolina for their cooperation and guidance in the administration of the program.

Marvin A. Campbell, Manager
CHAMPUS Department

The Committee, therefore believes that continued liaison with the CHAMPUS Program is necessary and desirable. We will do our best to see that the program operates on a high level of professional standards and that North Carolina physicians are kept fully informed.

Mr. K. G. Beeston, Vice President of North Carolina Blue Cross and Blue Shield, Inc., Mr. M. A. Campbell, CHAMPUS Department Manager and his staff have continued to give excellent cooperation and administration. The counsel and activities of Mr. William N. Hilliard and the staff at the headquarters office of the Medical Society have been invaluable.

James H. Manly, Jr., M.D., Chairman

COMMITTEE ON CHRONIC ILLNESS

The Committee met on September 24, 1971, at the Annual Conclave of Committees in Southern Pines, with Dr. Rose Pully acting as Chairman. Thomas R. Nichols, M.D., was called upon to report on the Governor's Coordinating Council on Aging, as the State Society's representative, on the Council. In 1965 the General Assembly named the Council on Aging and gave it certain duties and responsibilities, as follows:

1. Review of programs and recommendations for the Governor and General Assembly.
2. To disseminate data and information relative to all aspects of aging.
3. Educational effort for organizations and for elderly patients.
4. To act as a liaison in supplying information to coordinating agencies.
5. To consult with and inform the State Government Agencies in promoting employment opportunities, identifying research needs and establishing demonstration programs, for the aged.

The Council itself is composed of 31 members. Thirteen of which are members of major State Departments and seven are citizen members appointed by the Governor. The thirteenth representative is appointed by the President of the Medical Society. The Council meets at the discretion of the Chairman usually averaging two to four meetings per year.

Dr. Isa Grant, State Board of Health reported on the Governor's White House Conference on Aging. Dr. Koomen appointed Dr. Grant to a Task Force in the area of Public Health. The Committee was expanded into Health and Mental Health and Dr. Michael McCauley was named as Chairman. The Council on Aging coordinator was Mrs. Annie Mae Pemberton. Representing the Medical Society on the committee was Dr. Edgar T. Beddingfield, Jr. Other groups represented were the State Nurses' Association, The Blind Commission, the Gerontology Research Group at Duke University, The American Association of Retired Persons, the State Department of Social Services, Recreational Commu-

sion and private citizens. The Governor's Council set up regional conferences in 17 regions designated by the Governor.

The meetings were structured around issues which were decided upon in Washington, D. C. The Committee on Health was assigned seven issues. These reports were condensed into a position paper by Dr. McCall and Dr. Grant. Dr. Grant introduced Miss Jane Perry, R.N. from the State Board of Health who presented a report on "Home Health Services." Miss Perry reported a change in the Department's reporting system. Surveys have been done showing percentages of hospital discharges and that a need for home health services developed. It was also stated that there was a general lack of sufficient coverage across the State and lack of use of services available and lack of cooperation from physicians, by patient referrals.

After this report the following MOTION was MADE, DULY SECONDED and PASSED to the effect that: THE MSSNC GO ON RECORD AS PROMOTING THE CONTINUATION OF HOME HEALTH SERVICES SO THAT IT MAY BE EXTENDED INTO THOSE COUNTIES NOT NOW PARTICIPATING IN THIS PROGRAM AND THAT THERE BE SUPPORTIVE DISSEMINATION ABOUT THIS TO THE ROSTER OF PHYSICIANS IN NORTH CAROLINA.

Dr. George Watson, State Board of Health discussed the use of follow-up forms regarding patient certification and "appropriate level of care" in long term care facilities. Different levels of care were discussed. The Committee took the following action. A MOTION was MADE, DULY SECONDED and PASSED to the effect that: THE COMMITTEE ON CHRONIC ILLNESS STATES TO THE EXECUTIVE COUNCIL ITS CONCERN ABOUT A DECISION OF THE STATE LEGISLATURE TO LIMIT PAYMENTS FOR CARE GIVEN BY NURSING HOMES ON THE SAME LEVELS NOT TAKING INTO CONSIDERATION THE AMOUNT OF SERVICE THAT IS PROVIDED.

J. Dewey Dorsett, M.D.

COMMITTEE ON COMMUNITY MEDICAL CARE

The Committee on Community Medical Care had its annual meeting in September 1971. Reports on programs concerning Community Medical Care at the three state medical schools were presented.

The main discussion of the day was concerned with medical foundations and health maintenance organizations. As a result of prolonged deliberations, a request was forwarded to the Executive Council recommending dissemination of information concerning these two concepts to the membership of the State Medical Society in general.

J. Kempton Jones, M.D., Chairman

COMMITTEE ON COMPREHENSIVE HEALTH SERVICES PLANNING

The Committee on Comprehensive Health Services Planning has maintained its policy of continuing monitoring and overview of the health planning movement

and function within the state during this Administrative year (1971-72).

The major meeting of the Committee was held during the Annual Meeting of Committees at Mid Pines on September 22, 1971 and was chaired by John A. McLeod, M.D., Vice Chairman of the Committee. At that time reports were heard and received from many of the Planning Regions of North Carolina regarding health planning activities. Staff personnel from the State Office of Comprehensive Health Planning were present by invitation to participate in the discussions that developed and to act as resource people on matters of state and federal governmental participation in the planning efforts.

The Society's Guide to Comprehensive Health Planning (2nd Edition) has been complemented during the year when germane developments occurred.

The Committee continues to urge the members of The Society to become actively involved in the functions of Comprehensive Health Planning whenever and wherever the opportunity arises.

Frank W. Jones, M.D., Chairman

COMMITTEE ON CONSTITUTION & BYLAWS

Annual Report presented in the House of Delegates Sunday, May 21, 1972, Cardinal Ballroom, The Carolina, Pinehurst.

Henry J. Carr, Jr., M.D., Chairman

COMMITTEE ON CREDENTIALS

Certification of Delegates and report to House of Delegates at opening session, Sunday, May 21, 1972, Cardinal Ballroom, The Carolina, Pinehurst.

Charles B. Wilkerson, Jr., M.D., Chairman

ADVISORY COMMITTEE TO THE CRIPPLED CHILDREN'S PROGRAM

This Committee met at Mid Pines September 22, 1971. Requirements for physician participation in the Crippled Children's Program were worked out in accordance with the expressed wishes of the House of Delegates and approved by the Crippled Children's Section. Essentially it is required that the participating physician be licensed in the State, be Board certified, and submit a Curriculum Vitae. There must be two letters of recommendation and a letter from the applicant's hospital concerning his staff affiliation and privileges. These requirements were approved by the State Board of Health on October 28, 1971.

Information concerning the Crippled Children's Program and requirements for being added to the roster of participating physicians can be obtained by writing to Dr. Ruth Burroughs, Box 2091, Raleigh, North Carolina 27602.

The Committee has had no further meetings.

Jack Hughes, M.D., Chairman

COUNCIL ON REVIEW AND DEVELOPMENT

Edgar T. Beddingfield, Jr., M.D., Chairman
(Report not received 4/6/72)

COMMITTEE ON DISASTER & EMERGENCY MEDICAL CARE

During the winter months two committee meetings have been held at Society Headquarters in Raleigh. To broaden coverage, representatives of the Hospital Association, Medical Care Commission, Civil Defense Agency, and Regional Medical Program, were asked to participate.

Further impetus in the concern for Emergency Care was given with the appointment of a Legislative Research Commission by Governor Robert Scott. This Commission authorized under S.R. 827 is chaired by Senator F. O. Neil Jones and is composed of eight legislators, a representative from the North Carolina Hospital Association and two members from the State Medical Society. The Commission is directed to study and investigate the occurrences of injuries and fatalities caused by accident and acute diseases among persons in North Carolina and formulate a comprehensive Emergency Care Service system in the State.

Bi-monthly meetings in the Legislative Building have been held. To date, interest has been centered on ambulance licensing requirements, ambulance attendants training, and communications. Under the direction of communication engineers, a plan for state-wide radio coverage has been developed. This would allow for radio transmission between hospitals, ambulance and rescue squad vehicles. The obvious advantage this Commission possesses is that it is in a position to initiate legislative action.

Under current consideration is a recommendation to transfer responsibility for the mobilization of medical manpower during times of disaster to the State Board of Health.

George A. Watson, M.D., Chairman

COMMITTEE ON DRUG ABUSE

The Committee on Drug Abuse for the Medical Society of the State of North Carolina had two regular scheduled meetings—September 24, 1971 and January 28, 1972. In addition, several items of business were conducted through telephone communication and correspondence between the Chairman and the membership. Minutes of the two regular meetings are on file in the Headquarters Office.

The Committee worked closely with the last General Assembly, which re-wrote the State's drug laws, appropriated special funds for community drug treatment programs, and established the Drug Authority. Many of the Committee's recommendations are incorporated into these laws.

The Committee has been working with the North Carolina Drug Authority in preparing guidelines to implement the drug laws. The chairman of the Committee is also a member of the thirteen-man North Carolina Drug Authority. The acting Director of the Drug Authority is a consultant to the Committee.

The Committee has worked closely with the Department of Mental Health in developing plans for statewide drug abuse treatment. These plans call for primary emphasis on community based comprehensive drug abuse programs under the supervision of the local mental health authority, through the mental health centers. Parts of the program may be contracted to other local

resources. The first state funding, in the amount of \$500,000 this biennium, is available on a dollar-per-dollar matching basis to local mental health authorities. The Department of Mental Health encourages program development and provides quality control. The regional mental hospitals will continue admitting drug dependent patients as in the past. The chairman of the Committee is also Director of Drug Abuse Programs for the Department of Mental Health.

Most of the component county medical societies have a drug abuse committee in their society. The chairman of these local society committees have met with the State Committee in one of the formal meetings. This provided communication between the state and local committees and combines efforts toward certain goals, such as disseminating information, promoting local drug abuse programs, and encouraging physicians to carefully evaluate the danger of over-prescribing certain drugs with high potential for abuse.

The State Committee and the various local committees have been supportive of the local volunteer citizens Drug Action Committee movement. Physicians have been members of the Drug Action committees. In a number of cases, they have provided leadership and medical support. Some of the local Drug Action committees have incorporated and established locally financed drug abuse programs. These vary in sophistication with the different communities. They have combined to form a state organization called the North Carolina Drug Action Association. They disseminate information, influence public opinion and legislation, and promote drug treatment programs. Some are operating local drug programs, which contract with the mental health centers, to receive state funds and provide a part of the comprehensive community drug abuse program. Several have provided the local matching funds to bring state funds to their community. The Committee is concerned that these programs have proper supervision.

The Committee has been working with the United Health Services, special drug abuse program called CODAP (Community Organization for Drug Abuse Prevention). This group has been active in organizing communities across the state to examine their drug abuse problem and unite to provide effective programs. They also provide consultation at local and state level. They are promoting the same idea of community based treatment for the State's main emphasis on drug abuse. Individual physicians and committee members have been cooperating with their effort.

The Committee has examined the resolutions concerning drug abuse as passed by several local member societies and special societies, including: Mecklenburg County, Forsyth County, Wake County, Buncombe County and the Guilford County Medical Societies, Raleigh Academy of Psychiatry and the North Carolina Neuropsychiatric Association. The Committee has generally endorsed these resolutions and notes that prescriptions for amphetamines have been reduced almost 90% in Mecklenburg County, since that resolution was passed, according to information from the local committee. Other communities could expect similar results. The Committee has encouraged this type resolution at the local society level.

The Committee has encouraged local societies to consider resolutions concerning Bromides and other

over-the-counter drugs, as well as other prescription drugs, and that other over-the-counter preparations containing a drug of high potential for abuse, be considered by the State Board of Health for prescription control.

The Committee has developed a "Statement of Policy on Drug Abuse and Dependency" for the Medical Society. This Statement was printed in the October 1971 issue of the *North Carolina Medical Journal*. This Statement has also been printed in brochure form and is available from the Headquarters Office.

Last year the Committee made a questionnaire survey of the membership of the Medical Society in cooperation with The Institute of Human Ecology (TIHE) concerning drug abuse as seen in medical practice. Limited funds prevented an extensive survey with reliable data. This year, the survey was analyzed and summarized. The survey shows drug abuse patients throughout the state to be coming to the attention of physicians in increasing numbers. A wide variety of drugs are being abused. A considerable number of patients are young and a considerable number of experimenting. The Committee felt this survey was inadequate in producing hard data to really merit publication. Better computer analysis, when additional funds are available, could give us a baseline for future surveys.

The Committee has prepared a statement of function, purpose, and objectives for the Drug Abuse Committee of the Medical Society as follows:

The Drug Abuse Committee should:

1. examine the nature and extent of drug abuse in this state and report its findings and recommendations to the Medical Society. This examination should include information from the Medical Society and health related fields, research, law and order and other sources,
2. help develop a Medical Society resolution on drug abuse, with emphasis on various aspects of this as related to medicine,
3. serve as a forum for the members of the Medical Society to express their views and have them incorporated into the thinking and planning of the total body,
4. evaluate information on drug abuse in the scientific press and provide members of the Society a list of resources for information,
5. encourage continuing education on drug abuse for physicians through special programs and articles, or as part of the annual convention programs,
6. encourage the Medical Society to keep attention focused on the problem of drug abuse, as long as it presents a serious hazard in this state,
7. provide consultation in development of laws and regulations concerning drug distribution. In this area, the Committee would help serve as liaison between the Medical Society and the regulating body,
8. encourage local components of the Medical Society and individual members to participate in planning and operation in drug abuse programs in their communities,
9. serve as a forum for special questions, problems, etc., coming to the attention of the Medical Society,

10. serve as part of the Medical Society's organized governing body, and as support to the President of the Medical Society.

The Committee notes that statistics from other sources, including: Mental Health Department, SBI arrests, other law enforcement agencies, community surveys, school surveys, and reports from patients indicate that there is a marked rise in drug abuse, including a variety of drugs, particularly heroin, amphetamines, hallucinogens and marihuana.

The Committee is now working with the North Carolina Drug Authority and the Attorney for the Medical Society to prepare a condensed brochure for doctors, summarizing the drug laws as they related to the physicians' practice.

The Committee has examined the twelve local community based drug abuse programs funded through the Department of Mental Health in this fiscal year. They meet the recommendations of the Drug Abuse Committee.

Dr. Walker Wallmann, Director of Mental Health, Division of Scientific Activities, American Medical Association requested and has been provided information from the Committee concerning the activities of the North Carolina Medical Society in drug abuse prevention.

Benjamin E. Britt, M.D., Chairman

COMMITTEE ON EYE CARE AND EYE BANK

The Committee on Eye Care and Eye Bank met during the Committee Conclave in Southern Pines in September 1971, with the agenda covering the usual things in the Eye Care Committee.

Our main subject of discussion was how we could effectively help the Department of Social Services in reducing the cost of eye care examinations and glasses for indigent patients. This was discussed in great detail. A committee was appointed to review the situation and come up with some cost figures, as well as an attempt to establish some guidelines for the Department of Social Services to use regarding frequency of examinations and strength of prescriptions which warranted an initial issue of prescription or a change of prescription.

The committee follows with great interest the Blind Commission appointments.

A word of appreciation is extended to the members of the Eye Care Committee, along with other members of the Medical Society, for their efforts in influencing the assistant to a physician legislation in the 1971 General Assembly.

Paul M. Abernethy, M.D., Chairman

COMMITTEE ON FINANCE

The Committee on Finance met in September to prepare the budget for 1972. As in the previous year, the budget was based on essentially assured income and necessarily was a rather tight one. Since that time, almost all of the space in the headquarters building has been leased, providing about \$15,000 additional prospective income for 1972. In view of that fact, the Council in January directed the Committee to revise the budget and to provide for the addition of a second field representative to the headquarters staff. This is planned.

Efforts continue to sell the land near the airport. In late summer of 1971 Plaza Associates, Inc., a development firm, paid \$500 for an option on the property for six weeks, but let the option lapse at the end of this period.

As of this time, the financial situation and outlook are more favorable than was true a year ago. Both officers and committee chairmen have effected economies which contributed to a budget surplus for 1971. The practice of utilizing all available operating funds before borrowing money to make construction payments has minimized interest costs to the Society. It would appear at present that the extra fifty dollars dues will bring in sufficient funds to pay for the building in 1973 without counting on sale of the airport property. Sale of the property would then give the Society an excellent new, home free of debt and a nest egg of cash invested as a safeguard against emergencies.

Report of the annual audit and the revised budget for 1972 are presented to the House of Delegates for review and approval or change.

T. Tilghman Herring, M.D., Chairman

COMMITTEE ON HEALTH CARE DELIVERY

Early in 1971, President Styron, asked me to organize and chair the Committee on Health Care Delivery. This activity paralleled certain interests and activities to which I was personally committed in the Durham-Orange County Medical Society, as Chairman of its Long Range Planning Committee. This committee was concerned with studying various health delivery systems with the thought of applying possible innovations to needs in the Durham-Orange County area. Though the job description given by Dr. Styron to the Committee on Health Care Delivery was reasonably nebulous, the interpretation was simply this: to study the concepts of Medical Care Foundations and Health Maintenance Organizations, and to encourage the development of desirable innovations in health care delivery systems in North Carolina.

The Long Range Planning Committee of Durham-Orange County was meeting monthly to address itself to the same issues, and the State Medical Society provided leadership, interest, and support of these activities through the personal participations of President Styron, Mr. William Hilliard, and Mr. Dan Mainer.

In August, 1971, the Committee on Health Care Delivery of the Medical Society of the State of North Carolina sponsored a site visit to Stockton and Sacramento, California, to visit the San Joaquin Medical Care Foundation, the Sacramento Medical Care Foundation, and the Sacramento Kaiser-Permanente facility. The purpose of this site visit was, of course, to study and observe firsthand the Medical Care Foundation system that has evolved in California as well as a comparison between the Medical Care Foundations and the prototype of all Health Maintenance Organizations, the Kaiser-Permanente system. The site visit team consisted of the following people, representing the following organizations: Dr. Patrick Kenan, Chairman, Committee on Health Care Delivery; Dr. Kenneth Cosgrove, First Vice-President of the Medical Society of the State of North Carolina; Dr. Harvey Estes, Chairman, Board of Directors, N. C. Regional Medical Program, and Chair-

man, Department of Community Health Science, Duke Medical Center; Dr. Lawrence Cutchin, practicing physician and member, Committee on Health Care Delivery; Dr. Frank Sohmer, practicing physician and representing Forsyth County Medical Society; Dr. Lee Holder, N. C. Regional Medical Program; Miss Margie Rose, State Office of Comprehensive Health Planning; Mr. George Stockbridge, representing N. C. Blue Cross-Blue Shield, and Comprehensive Health Planning Council of Central North Carolina; Mr. Ashley Gale, Hospital Section, Duke Endowment; Mr. James Felts, Trustee, Duke Endowment and Executive Director, Hospital Section of the Duke Endowment; Mr. Dan Mainer, field representative, Medical Society of the State of North Carolina. A report of this site visit was made by the physician members who participated in same to their respective County medical societies, subsequent to their return, and to the full Committee on Health Care Delivery at the Fall Conclave of the Medical Society of the State of North Carolina when it met September 24, 1971.

At the Fall Conclave, it became evident that there was considerable overlap between the interests and activities of the Committee on Health Care Delivery, and the Peer Review Committee chaired by Dr. John Glasson. The two committees recommended co-sponsoring a weekend conference on Health Care Delivery and Peer Review Mechanisms which would attract representatives from every county medical society in North Carolina. In addition, the Committee on Health Care Delivery resolved to encourage research, experiments, innovations, pilot model programs, and new methods of health care delivery. This resolution as well as the recommendation to co-sponsor the weekend conference with the Peer Review Committee were presented to the Executive Council when it met on September 26, and these recommendations were approved by the Council.

The joint conference on Health Care Delivery took place in Greensboro at the Albert Pick Motel on December 4 and 5, 1971. In addition, to the Peer Review and Health Care Delivery committee co-sponsorship, the N. C. Regional Medical Program provided a major boost by providing financial sponsorship for this conference. The program involved presentations of the Health Maintenance strategy by Dr. Lee Holder, a report of Medical Care Foundations as observed during the California site visit by Dr. Lawrence Cutchin, and a discussion on Peer Review Mechanisms by Dr. John Glasson. A Reactor Panel representing urban and rural practitioners, the private health insurance industry, N. C. Blue Cross-Blue Shield, organized labor, medical education, and consumer interests reacted to the Foundation, HMO, and Peer Review concepts. Panel discussions covering Peer Review in its various forms (i.e., standards of medical practice, minimum insurance standards, fee schedules, and utilization review) provided additional information and needs that should be built into any peer review or innovative medical delivery system that might evolve in North Carolina. The guest speaker for the conference was Dr. F. William Dowda, President, Medical Foundation of Georgia, who spoke on the developing Georgia peer review foundation. The conference could not be an action-oriented session but proved mainly educational, with the primary emphasis being on the need for ongoing Peer Review Mechanisms.

An extremely important point was made by Dr. Ed Beddingfield at the Greensboro Conference. He predicted that the Bennett Amendment of HR-1 would most likely be enacted before the adjournment of the 92nd Congress in calendar year 1972. The Bennett Amendment provides for Professional Services Review Organizations (PSRO). The stipulations of the Bennett Amendment are that PSRO should be performed by Peer groups and as the amendment is currently written, medical societies and medical foundations are the logical organized elements of medicine to carry out PSRO functions. The amendment further stipulates, however, that if no acceptable PSRO plan is presented by local foundations or societies, a state or federal agency under the direction of the Secretary of HEW will be responsible for carrying out this function. The implication of Dr. Beddingfield's prediction is quite clear; namely, that this is a very timely subject for which organized medicine should plan and organize, and it is most appropriate that conferences of this sort be held locally and regionally in order that we might be ready for what is probably inevitable. The attitude was expressed that Peer Review would be vastly superior to Administrative Review carried out by an agency of the state or federal government.

At the Officer's Conference of the Medical Society of the State of North Carolina which met in Pinehurst, January 29, 1972, the Chairman of the Committee on Health Care Delivery gave a progress report on the activities of this committee and defined its current mission and responsibilities. This committee is inextricably related to the interests and activities of the Peer Review and Utilization Review Committees and has a responsibility to share in planning and organizing a statewide Peer Review Foundation under Medical Society of the State of North Carolina sponsorship. The Committee on Health Care Delivery should serve as a data bank in order to help stimulate the development of local or area wide Medical Care Foundations or HMO's where local interest and leadership for same prevails. The Committee is willing and desirous to provide resource material and faculty for local, regional, or area wide educational conferences on Peer Review, Medical Care Foundations, and Health Maintenance Organizations. Lastly, the Committee on Health Care Delivery feels that it should serve as a catalyst in bringing together for closer work and cooperation medical care providers, health planners and administrators, health educators, elements of local, state, and federal government concerned with health care delivery, private insurance carriers and North Carolina Blue Cross-Blue Shield, students and consumers, for it is likely that the development of any innovative system of health care will require coordinated and simultaneous input from multiple disciplines.

Patrick D. Kenan, M.D., Chairman

GOVERNOR'S COORDINATING COUNCIL ON AGING

Local, area and State preparation for the second National White House Conference on Aging held in Washington, D. C. in November and December 1971 has overshadowed almost all other activities of this committee. Its energies, activities and personnel have been directed towards planning for and attending the

conference, receiving and attempting to adapt pertinent principles to use in North Carolina.

On the 9th of February 1971, a special ad hoc committee met to draft an initial suggested legislative platform to present to the General Assembly. The issues involved in the field of health and mental health were in general accord with the 1971 legislative program of the Medical Society of the State of North Carolina and supported in general the program of the North Carolina Board of Public Health.

The meeting on the 21st and 22nd of May 1971 was totally devoted to the Governor's State Conference. The 500 representatives from throughout the State were gathered for the purpose of producing resolutions to be offered at the National White House Conference in November 1971.

The meeting held on the 14th of September 1971 was a final organizational meeting, conducted by Dr. Ellen Winston, who has organized the entire North Carolina program to this point and who was appointed to lead this delegation to the Washington Conference in November. At this meeting various resolutions were reviewed, minor changes made, delegates to the White House Conference were announced and various organizational responsibilities delegated. Your representative was appointed as one of the delegates from North Carolina, but due to previous commitments was unable to attend.

The meeting held in Raleigh, North Carolina the 25th and 26th of February 1972 was a North Carolina followup of the White House Conference on Aging, and was attended by over 150 persons, assigned to one of eleven task force work sessions. The final recommendations from these eleven groups were basically those of directive to the Governor's Coordinating Council to stimulate, supervise and coordinate certain specific recommendations on the local, area and legislative levels.

A point of interest is that from July 1970 through this last meeting in February of 1972 the Coordinating Council has attracted and actively involved somewhat under 22,000 North Carolina citizens, primarily those in the group of the elderly or those interested in the problems of the aging. The political orientation and enthusiasm of this group is obvious.

The success of this grass roots oriented program bears out a philosophy developed in certain segments of the State Medical Society some years past.

In the deliberations of the committee, as well as in the State wide meetings, the more conservative and practical medical philosophy has been presented and for the most part sustained with the help of Dr. Jacob Koomen (representing the State Department of Public Health), Dr. Isa Grant, chairman and Dr. Michael McCall, co-chairman of the sections on physical and mental health and nutrition.

The status of the Council, which has been reassigned into the Department of Human Relations, is somewhat uncertain due to the continuing reorganization moves of the State Governmental Agencies.

It is pleasing that Dr. Lenox D. Baker, well known to the medical profession, has been named to serve as the first secretary of this new department of Human Resources.

Thomas R. Nichols, M.D., Representative

COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS AND LIAISON TO THE NORTH CAROLINA HOSPITAL ASSOCIATION.

The Committee met during the annual Committee Conclave on September 23, and endorsed the formation of a Joint Committee for planning a Hospital Medical Staff Conference. Members of this committee participated in the subsequently appointed Joint Committee.

The Committee represented the Medical Society in co-sponsoring a workshop on the new standards of the JCAH, which was conducted in Charlotte on November 18 and 19. Most of the work involved in this workshop was carried out by the North Carolina Hospital Association staff. Your chairman attended this conference.

A brief written description of a statement of functions, purposes and objectives of this Committee were sent to the Headquarters Office in December.

No complaints were submitted to the Committee by any member of the Society regarding any difficulties with hospital staff appointments.

The chairman of this Committee plans to attend the meeting of the Public Relations Committee on March 19, 1972, for discussion of "Joint Conferences for Hospital Trustees, Administrators, and Hospital Medical Staff."

The Committee would like to point out that many of the subjects on which it has made recommendations in the past are now included in items which were strongly recommended by the JCAH for hospitals and hospital bylaws; namely, physician representation on hospital Boards of Trustees, provision for due process in the appointment of hospital staffs, including salaried physicians.

J. M. Van Hoy, M.D., Chairman

INSURANCE INDUSTRY COMMITTEE

The Insurance Industry Committee has had an extremely busy and sometimes turbulent year. We have considered many problems of a liaison nature with the commercial carriers.

Our major function, the CLAIMS REVIEW SERVICE, has been very, very active. We are finding an increasing number of claims submitted at the request of physician members of the Medical Society; we feel that this is a very good sign as it indicates an expanding awareness of our existence.

In the Claims Review Service, our focus is no longer on the adjudication of fee disputes; rather, we have moved inexorably into the realm of retrospective peer review. We have been asked to advise the carriers as to necessity for and as to the utilization of services rendered in the hospital, the office, and the home. We have been asked to advise the carriers as to extended hospital stays, for charges and services rendered by hospitals, and for certain out-patient services. It is our function to advise the carrier as to the liability that exists under the terms of the commercial insurance contract or under the provisions of the Part B Medicare Act. We never attempt to set fees or to interfere with the doctor-patient relationship.

In an effort to give each claim a most thorough and fair evaluation, we have not hesitated to obtain the

admission notes, order sheets, progress notes, laboratory data, and discharge summaries. We have regularly obtained operative notes and we write attending physicians for additional information when indicated and requested by the committee.

Our liaison and our relationship with the Part B Medicare carriers are superior and we are confident that our recommendations are accepted on the cases that are reviewed for them. This should give the physicians of North Carolina great satisfaction to know that this is done despite the fact that the carriers are specifically *not required*, under the law, to do so.

Our liaison with the commercial carriers (which writes some 70% of the insurance coverage in North Carolina) is equally superior. As with the Part B Medicare carriers, we can nearly guarantee that any physician having a problem of nearly any kind with a commercial carrier in North Carolina can and will get fair, prompt, and effective handling of that problem.

Bernard A. Wansker, M.D., Chairman

COMMITTEE ON LEGISLATION

Edgar T. Beddingfield, Jr., M.D., Chairman
(Report not received as of 4-6-72)

COMMITTEE ON MARRIAGE COUNSELING AND FAMILY LIFE EDUCATION

For several years this committee has offered speakers for County Medical Society meetings, hoping:

1. To help N. C. physicians (a) recognize, and (b) deal more effectively with family and sex life stresses when such stresses contribute importantly to illness.
2. To interest N. C. physicians in State School Family Life and Sex Education programs at all levels and enlist their support both for starting new programs and helping to improve any programs already in existence.

This effort was a near failure; we received few invitations.

At the 1971 Mid Pines Conclave meeting, we planned a new approach, via, letters to potentially interested officials in all North Carolina Collegiate Institutions. There were 76 such institutions and on November 30 the following letter was sent to Deans of Students, Directors of Student Health Services and Student Body Presidents.

Dear . . .

The North Carolina State Medical Society has become interested in improving Sex, Marriage and Family Life Education in the schools of North Carolina at all levels. Why? Because many of the people who seek help from doctors have been made sick by sex, marriage and family life stresses which we think could have been prevented by the better education of young people about these matters.

Nearly everyone recognizes that these stresses cause socioeconomic malfunction. North Carolina doctors, have had to recognize not only that these same stresses do cause illnesses but also that such problems and illnesses, when fully established, are so time consuming, difficult and generally unsatisfactory to deal with that

we need to prevent them if possible. We classify both our interest and this action in the category of Preventive Medicine.

For several years the Medical Society, focally through his committee, has been interested and active with efforts to improve the situation. The efforts have met with variable and, in general, limited success, perhaps because our recognition of the need for change is in advance of public acceptance for it.

Clearly, we need help and are anxious to pursue any lead that offers promise. Pursuant to a directive from our committee, I, as chairman, am writing to discover, if possible, any such lead in your area of education. Specifically, I should like to ask you:

1. What student needs do you perceive in the area of sex and family life education?
2. Have you any suggestions as to proper and feasible steps to meet these needs? and,
3. Do you think it would help to have someone from the committee or the State Medical Society discuss these problems with you, either privately or in open forum?

I should be very much pleased to have your thoughts on these matters. Thank you for your consideration and for any help.

Very sincerely yours,

Thirty-five responses to this letter were received prior to the time of this report. Most of them indicated need, interest and a desire to collaborate with and/or receive help from the North Carolina State Medical Society.

The Committee met on December 28 to consider next steps. We plan first to review for possible endorsement the most modern and explicit audio-visual teaching materials we can locate. We anticipate that the use of these materials will create the need for preparing a cadre of doctors willing to be present at film showings to lead discussions and cushion the impact of the films on some people. Although we have theoretical backing for our liberal thinking and proposals in the stated philosophies of the North Carolina State Medical Society, The American Medical Association and The American College of Obstetricians and Gynecologists, we nevertheless expect controversy and that divergent opinions will be emotionally charged and hard to modify. We propose for emphasis as a relatively neutral theme: "Sex Can Be Talked About, — Including the Fact That One May Be Against It (i.e., against any changes from past standards)".

The Committee also talked about the possibility of a seminar on ways and means to effect progress, say a two day or weekend meeting to which we would invite religious leaders, doctors and the college people who have let us know that they are interested.

Our final action for this year must await another committee meeting and review of the materials which we are trying to obtain.

Eleanor B. Easley, M.D., Chairman

COMMITTEE ON MATERNAL HEALTH

During 1971 the Committee on Maternal Health collected a total of 61 maternal deaths which were reported through Certificates of Death filed with the

Bureau of Vital Statistics of the State Board of Health. Of the 61 maternal deaths broken down by race, 20 were white, 39 were non-white, and 2 were Indian women.

There were three deaths reported due to hemorrhage, seven due to infection, six due to toxemia, nine due to embolism, seven due to cardiac conditions, and two due to anesthesia. Five maternal deaths were due to other obstetrical causes and twenty-two were due to non-obstetrical causes.

The five deaths due to other obstetrical causes were one each as follows:

Subarachnoid hemorrhage due to congenital cerebral aneurysm

Sickle cell crisis at two months gestation

Air embolism near term due to an unusual sexual act

Heavy metal poisoning, acute mercurial intoxication incidental to abortion

Miliary tuberculosis undiagnosed prenatally

Sixty-one maternal deaths for 1971 as compared to seventy-eight in 1970 represents the lower number of maternal deaths which we have had in any given year in the past. There is, however, an annual fluctuation of 10 to 15 maternal deaths, more or less. It is of interest to note that hemorrhage and toxemia, traditionally leading causes of maternal death are again not the most prominent causes in 1971. Infection and cardiac deaths with seven each, and embolism with nine deaths, are the leading causes for 1971. Embolism remains a prominent cause of maternal death, as was pointed out in 1970 when there were 15 embolism deaths reported. In 1970 and again in 1971 there were seven deaths due to infection. A number of these infection deaths were associated with criminal abortions, which indicates that therapeutic abortion has not eliminated criminal abortion if indeed it has reduced the practice significantly at all.

The Maternal Health Committee continued to tabulate the voluntary reporting project of therapeutic abortions through June of 1971. The reporting of therapeutic abortions became mandatory to the State Board of Health through legislative statutes in July of 1971. The Committee Chairman reported the first two and one-half years experience in an article, "Therapeutic Abortion Experience in North Carolina Under the Liberalized 1967 Law," *North Carolina Medical Journal*, 32: 186, May 1971. An editorial recognizing the changing medical responsibilities in abortion matters appeared on page 193 of the same issue of the *North Carolina Medical Journal*.

The Committee devoted considerable thought and time in communication with the State Board of Health in arriving at acceptable medical guidelines for a unified Statewide Family Planning Program. The Committee, at its Annual Meeting in September recommended a favorable report on the State Board of Health's Family Planning Program and the Executive Council endorsed the Program in September 1971.

During 1971 the Committee members made an appraisal of the views on the function, purpose and objectives of the Committee on Maternal Health. The following is a summary of the views expressed by the committee members:

In recognition of the fact that the maternal mortality and the perinatal mortality in this State are still above

national and international levels, it is felt that the Maternal Health Committee of the Medical Society still should serve the future in helping to bring these parameters of community health to an irreducible minimum, or at least bring them down to national averages. Although the combined figures for North Carolina are fairly comparable, the great discrepancy between white maternal mortality and perinatal mortality, and the much higher rates for the nonwhite are indicators that the objectives of the Committee on Maternal Health have not been completely fulfilled. The overall purpose of the Committee should be that of advisor to the practicing physicians of North Carolina who participate in maternal care as well as the State Medical Society and the State Board of Health. The overall objectives being aimed at improving maternal health and reducing maternal deaths and morbidity in the State of North Carolina.

The duties of the Committee should be as follows:

1. Promote the highest standards of obstetrical care for women in the State of North Carolina. This should be accomplished by providing for education of the public for adequate maternal and child care.
2. Devise and provide for the medical profession of the State of North Carolina the dissemination of educational information wherever it applies to maternal health care in any of its ramifications.
3. Continuation of the Survey on Maternal Mortality in the interest of determining preventability.
4. The Committee should concern itself with all legislation pertaining to maternal health. It should keep abreast of professional advances and recognize the rapidly changing standards and methods of delivery of health care as it relates to maternal health, and convey the same to the profession in North Carolina.
5. The Committee should try to make recommendations which would implement public programs to serve the best interest of the patient and her physician.
6. The Committee should follow and promote generally the high standards of maternal care which are recommended by the Committee on Maternal Health of the American Medical Association and the American College of Obstetricians and Gynecologists.

The Committee Chairman continued to be cognizant of the necessity for frugal management of the State Society's money and has made every effort to reduce the costs of the Committee's operation, and will make a continued effort this ensuing year to save as much as possible in the operation. A financial statement for 1971 is on file in Headquarters Office.

I wish to thank the members of the Executive Council and the Headquarters staff for their help and co-operation.

W. Joseph May, M.D., Chairman

MEDIATION COMMITTEE

The Mediation Committee has met the needed number of times during this Administrative year (1971-72) to accomplish the functions assigned to it. The Committee has noted a possibly developing trend toward

the channeling through, or the referral by, of incidents reports by certain governmental type agencies to the Society.

Frank W. Jones, M.D., Chairman

COMMITTEE ON MEDICAL ASPECTS OF SPORTS

The 1971 committee membership consisted of Frank C. Wilson, M.D., Chairman; Frank H. Bassett, M.D.; Basil Boyd, M.D.; Frank W. Clippinger, Jr., M.D.; Joseph L. DeWalt, M.D.; James R. Dineen, M.D.; Walter Durr, M.D.; A. Tyson Jennette, M.D.; Dean C. Jones, Jr., M.D.; C. Robert Lincoln, M.D.; Marshall Morris, M.D.; Donald B. Reibel, M.D.; Richard Wrenn, M.D.; Mr. David A. Harris and Mr. Raymond K. Rhodes.

The major accomplishment of the committee in 1971 was the production of a symposium on the Medical Aspects of Sports which was held at the Blockade Runner Motel, Wrightsville Beach, North Carolina July 4-6, 1971. The symposium was felt to be an extremely worthwhile educational effort. Sixty-three physicians registered for the meeting which had a format of morning scientific programs and free afternoons. Most of the physicians attending were involved with organized athletics in their community. It is planned to make this Symposium an annual affair.

A policy statement on the medical aspects of sports was developed for the State Medical Society for distribution to appropriate officials in all public school systems throughout the state.

It was felt by the committee that a standard form for the examination of athletes participating in organized sports should be developed for the state public school system. A standardized form has been developed and will be submitted to the Executive Council for approval in January of 1972.

A Governor's Conference on Medical Aspects of Sports was requested of Governor Scott. The Governor was very much in favor of this proposal and has agreed to sponsor such a conference at the annual "Coaches Huddle" in Greensboro in August 1972.

Frank C. Wilson, M.D., Chairman

COMMITTEE ON MEDICAL EDUCATION

Richard H. Ames, M.D., Chairman
(Report not received as of 4-6-72)

COMMITTEE ON MEDICAL-LEGAL

Review of work done to date.

The Chairman attended the Annual Medico-Legal Symposium sponsored by the American Medical Association and the American Bar Association in New York City in March of 1971. This was a three day meeting, most of which pertained to professional liability.

A meeting of the Medical-Legal Committee was held in Mid Pines on September 22, 1971. The status of the proposed revision of the Interprofessional Code was discussed and it was proposed that President Styrc write to the President of the North Carolina Bar Association in this regard. This later was done. M

Ralph Strayhorn, President of the North Carolina Bar Association has notified our Committee that the matter of the Interprofessional Code will be taken up at the next meeting of the Board of Governors in April of 1972.

The Committee discussed at length the matter of our responsibility for obtaining medical opinion for attorneys in a possible malpractice action. It was the consensus of the committee that this was not the responsibility of our committee, the Medical Society of the State of North Carolina not having a program at this time to furnish medical opinion in this regard.

Joint meetings were held in approximately thirty counties during the year.

Several inquiries as to the Medical-Legal problems from physicians in the State were handled in a routine manner during the year. Also, there were inquiries from three attorneys during the year in regard to their obtaining medical evaluation of their client in regard to possible malpractice action against physicians.

The Chairman testified before the Malpractice Panel of Health, Education and Welfare in Washington, D. C., on December 17, 1971, as a representative of the plastic surgery specialty.

No instance of alleged unethical action on the part of physicians has been reported to the Committee.

Julius A. Howell, M.D., Chairman

COMMITTEE ON MEDICARE

The Committee on Medicare has had two meetings at the date of this report. The first meeting was held September 23, 1971 at Mid Pines and the second meeting was held January 29, 1972, Pinehurst, North Carolina.

The first meeting was very well attended with only two members absent. A discussion was held in September concerning the Medicare coverage for patients who are transferred from a hospital to a nursing home or extended care facility. A guideline has been developed which allows the attending physician to make one routine visit each month to his patient in a nursing home, which will be reimbursed by Medicare. If the patient becomes acutely ill, visits will be reimbursed as they would be in the hospital during the time of the acute illness.

The problem of Medicare reimbursement to the extended care facilities was discussed, although it does not concern the physicians' fees. It was pointed out by the Blue Cross representative that only those patients who qualify for rehabilitation can be covered by Medicare.

A controversial matter regarding fees paid to physicians in various localities of North Carolina was discussed. It was pointed out by Mr. Brantley Shaw of the Prudential Life Insurance Medicare office that the geographic areas have been arrived at by studying the fee schedules used in the past and that fee reimbursement is made as equitable as possible taking into account the differences of office overhead, etc. in various communities. It was also pointed out, the customary and prevailing fees of the previous year have not been completely worked out so that payments made for the current year are usually based on fee schedules of approximately one and one half years in the past.

At the meeting January 29, 1972, the Committee focused its attention on case presentations by Mr. Shaw

regarding physicians who apparently abuse Medicare benefits by seeing patients very frequently in the office and giving a great many injections, such as Vitamin B₁₂ and Steroids. The cases of three physicians who were not named were presented to the Committee and it was decided that these cases should be investigated by the Medical Society's Mediation Committee.

Mr. James Willis of the Bureau of Health Insurance, Department of HEW, Atlanta, Georgia, commented following the January meeting that the cost of preventive health care is not covered under the Medicare guidelines. It was the opinion of some of the Committee members that preventive medical procedures such as Pap smears probably should be covered as a means of encouraging Medicare beneficiaries to come in for regular examinations.

In conclusion, the Medicare Committee has had excellent cooperation from the representatives of Prudential Life Insurance Company and we have appreciated the participation of representatives from the Department of Health, Education and Welfare who are based in the Atlanta office.

Charles H. Reid, M.D., Chairman

COMMITTEE ON MEDICINE AND RELIGION

This committee report will be a composite report of the Committee's activities from January 1971 through February 15, 1972.

The Medicine and Religion Committee met in Southern Pines in September 1970 to plan its activities for the 1971 calendar year.

A workshop for county society Medicine and Religion chairmen was planned and held January 28, 1971 at Pinehurst. The program consisted of the description of a partnership of medicine and religion by Dr. Richard Maybin and the Reverend Benjamin Davis in Lawndale, North Carolina. This is the first cooperative effort of this sort in North Carolina and one of the few in the nation.

On January 29, 1971 the chairman of the Medicine and Religion Committee spoke to the Conference on Medical Society Leadership on the role and function of State Medical Society's Medicine and Religion Committee.

On February 4, 1971, the chairman of this committee represented the N. C. State Medical Society at the Regional meeting of Medicine and Religion Committees in Atlanta, Georgia.

The Committee cancelled its plans for a state-wide Medicine and Religion symposium at the University of North Carolina for 1971 because of previous commitments of members of the committee.

In September 1971 the Medicine and Religion Committee met at the Medical Society Committee Conclave at Southern Pines. At this meeting the clergymen consultants to the Committee requested and were given voting status as active committeemen.

Another workshop for county Medicine and Religion chairmen was planned and held in Pinehurst on January 29, 1972. The program consisted of the film, "A Storm—A Strife" and a group discussion led by the committee members.

At the September 1971 meeting the committee also planned and appointed the chairman of this committee and the Reverend Fred W. Reed as co-chairman to

plan a symposium to be held at the University of North Carolina on August 21 and 22, 1972. The title of the symposium is to be "Modern Man and Medical Ethics."

On February 5, 1972, the chairman of this committee and the Reverend Reed attended the 1972 Regional Workshop for Medicine and Religion Committees of Southeastern U.S. in Atlanta, Georgia. A feature of the program at this meeting was "A Partnership in Patient Care," presented by Dr. Richard Maybin and the Reverend Ben Davis of Lawndale, North Carolina. This is a physician-clergyman partnership providing primary health care for Dr. Maybin's patients.

The Committee reports that the Wilson County and Pitt County Medicine and Religion Committees continue their monthly meetings, furthering the aims of the AMA and State Medical Society Medicine and Religion Committees. Other meetings of county Medical Society and Ministerial Associations have been reported across the state.

In January 1972, a questionnaire was sent to all Medical Society presidents and Medicine and Religion chairmen to find out how the State Committee could be more helpful in promoting activities of Medicine and Religion in North Carolina.

Nineteen (19) responses were received. Many of the responses showed confusion about what the Medicine and Religion program hoped to achieve. It is felt that a re-statement of the purpose and function of the Medicine and Religion Committee should be made here.

PURPOSE AND FUNCTION OF THE COMMITTEE ON MEDICINE AND RELIGION

Recognizing that the patient has mental, physical and spiritual needs, the basic purpose of the Medicine and Religion Committee is to encourage and help provide a climate for communication between physicians and clergymen in order better to answer the needs of the *total man*, to provide *total care* for our patients.

To accomplish this purpose, the State Medicine and Religion Committee should provide leadership and guidance to the individual county medical societies which are trying to establish such a climate for communication and cooperation between ministers and doctors in their own locales.

At State Medical Society meetings, Committee Conclaves and State Officers' Conferences, the State Medicine and Religion Committee should provide educational literature, exhibits, films, speakers and panel discussion programs, so that physicians and clergymen across our state, aided in cooperating more fully with each other, can provide for the *total care* of our patients.

The State Committee has planned a prayer breakfast at the annual meeting of the Medical Society of the State of North Carolina for Tuesday morning, May 23, 1972, at the Carolina Hotel in Pinehurst. The Reverend Dr. Seward Hiltner of Princeton University will be the principal speaker. He will discuss "The Faith of the Patient." All Medical Society members and their wives are invited to attend.

Jack W. Wilkerson, M.D., Chairman

COMMITTEE ON MENTAL HEALTH

Much of the work of the Committee for this year has been around the concerns of Cherry Hospital. Our first sub-committee meeting was held on September 12, 1971 to discuss a letter which has been sent to our Committee from a physician who had had a part time position at Cherry Hospital. It was acknowledged by members of the Committee that Cherry Hospital has been understaffed and possible future staff connections with medical schools in the area were discussed. At the time of the meeting Dr. Schulte has not yet become the Director of Cherry Hospital but he pointed out that beginning in July, 1972 a high rate of utilization of mental hospitals could be anticipated. He also pointed out that the community law enforcement or other legal entities would not then be able to use the penal system for detainment of alcoholics. He suggested that the Department of Mental Health would then be required to provide transportation for these alcoholics to state hospitals. He also stated that the Joint Commission on Accreditation would require local county hospitals to provide emergency psychiatric facilities in order to be accredited. Dr. John McCain pointed out that the Advisory Medical Council of the State Board of Mental Health was preparing an evaluation of the services at Cherry Hospital.

The full Committee met on September 23, 1971 in Pinehurst. As Chairman of the Medical Advisory Council for the North Carolina State Board of Mental Health Dr. John L. McCain of Wilson gave a report regarding the situation and the problems at Cherry Hospital. He stated that Dr. Robert Myers, who had formerly been a member of the Joint Commission of Accreditation, had made surveys of the State Institutions. Dr. McCain expressed the hope that our Committee would participate in seeking solutions to some of the problems presented.

The Committee met again on January 7, 1972. The legal aspects of committing patients was discussed at some length. As we understand the law, it is necessary for a physician to swear before a notary public or a police officer with his hand on the Bible if the commitment procedure is to be legally correct. The Committee also discussed "Criteria For Rejection On Psychiatric Grounds By Selective Service System" and this material was published in the February issue of the Public Relations Bulletin. There was also considerable discussion around North Carolina's Title XIX Program for prior approval for certain services, particularly psychiatry. It was suggested that a joint committee could be formed to work with the Department of Social Services to form guidelines on these issues. The Department of Social Services was contacted with suggestions as to members of our Committee who might be considered for such a joint committee.

At the time this report is being prepared plans are being made for another meeting of our Committee to meet with Dr. Lenox Baker, Secretary, Department of Human Resources and Dr. Eugene Hargrove, Commissioner, North Carolina State Board of Mental Health at Cherry Hospital to explore further in what way our Committee can be of help in further resolving the problems that have arisen. The papers have recently carried a good deal of material about Cherry Hospital but most of the issues seem to concern administrative matters of that hospital and it would appear that the

S.B.I. report has revealed very little information that would properly concern our Committee.

Philip G. Nelson, M.D., Chairman

SUBCOMMITTEE ON ALCOHOLISM

The Subcommittee on Alcoholism met on May 20, 1971, at the Medical Society Headquarters Building in Raleigh. The Committee expressed concern over the fact that the Federal Alcoholism Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (S-3835—PL 91-616) sometimes referred to as the Hughes Bill has been delayed in its implementation by lack of funding at the executive level. It was moved and seconded that the Subcommittee on Alcoholism ask the Mental Health Committee of the State Medical Society to inform our North Carolina congressmen of our concern at the lack of financial support of this bill. The Committee also considered the need for increased funding of the Center for Alcoholic Studies at UNC in Chapel Hill and it was noted that the Mental Health Committee had responded favorably to the need for an increased appropriation for this Center.

Among other legislative items considered by the Committee was Senate Bill 214 which eliminates the requirement of reporting voluntary admissions of alcoholic and mental patients to the Department of Motor Vehicles. The Committee expressed its satisfaction that by the application of this bill, voluntary patients would not be penalized in this fashion. The problem of the management of the public intoxicant was discussed by the Committee and again the lack of available facilities to deal with these persons was pointed out. There is a movement to establish detoxification centers in the larger urban areas to deal with the public intoxicant and the Committee felt that it is important that adequate medical supervision of such centers be obtained.

It was noted with regret that Dr. Norbert Kelly, Consultant to the Subcommittee on Alcoholism has been forced to resign by reason of ill health.

D. E. Macdonald, M.D., Chairman

SUBCOMMITTEE ON CHILDREN'S SERVICES AND MENTAL RETARDATION

This Subcommittee has not been called together for a meeting during the past half year. Previous efforts during 1970-71 under this chairman met with such unenthusiastic response and poor attendance that it was felt advisable to not call a meeting unless some problem of overwhelming importance arose.

The past year has not produced any sudden changes or new problems in the areas of major interest to this Subcommittee.

Federal requirements for integration and some modifications of existing guidelines for expenditures of Elementary and Secondary Education Act funds have modified Special Education programs in some school systems.

Some special services and supplementary programs, e.g., counseling, cultural opportunities and some recreational programs have been curtailed or have failed to be expanded in some systems because of the increases in costs of transportation in those systems.

A program for psychotic children has been funded

and its service capabilities expanded, but there are still gross inadequacies in facilities and services for families and children with severe emotional problems.

The Study Commission on North Carolina's Emotionally Disturbed Children reported in December, 1970. Its many subcommittees had reported an appalling number of statistics about children and youth in trouble and there was little reported about facilities and agencies to help them.

The major recommendation was a Governor's Advocacy Commission on Children and Youth composed of 19 members, (citizens, legislators and administrators of child-serving agencies) who would:

- Act as spokesman for individuals and groups.
- Maintain a continuing assessment of efforts to serve children's needs.
- Work with existing agencies to develop approaches to fill gaps in child care.
- Help State agencies coordinate their efforts, develop joint programs and avoid duplication.
- Review new programs affecting children.
- Recommend ways for the Governor and the General Assembly to improve child care.
- Serve as the State structure for coordinating communication with federal advocacy systems.
- Provide information to the public.
- Provide assistance in development of regional and local child advocacy systems within the State.
- Develop methods for evaluating its own effectiveness.

The Study Commission on North Carolina's Emotionally Disturbed Children made 23 specific recommendations on Programs and Services, 17 recommendations on Manpower and Training and 8 recommendations on Research and Evaluation in addition to that regarding an Advocacy Commission.

The report is concise, points out a great number of lacks, inadequacies and inequalities in current facilities and programs and concern for children and youth and attempts to make some reasonable recommendations. It is obvious that no single group of otherwise gainfully employed individuals, even with a staff of resource people, could be aware of the myriads of factors relating to or affecting the needs or rights of infants, children and youth in anything more than a general fashion.

Coordination of planning in State agencies is always an excellent idea, but the complexities of the bureaucratic system, the somewhat archaic biennial budget system, the multiplicities of pressures on the individual agencies and the simple fact of the enormity of the state government act as recurring deterrents. Recent legislation has restructured the state government on paper, but no significant functional changes are apparent as yet. Putting several existing agencies with overlapping areas of interest under an "umbrella" with a new super-commissioner is a State replication of the Health, Education and Welfare concept and cannot be expected to guarantee any sudden increase in coordination or economy of operation.

In spite of all efforts and hopes there appears to be no reason to believe that State agencies will be supported without ongoing political pressure and fierce competition for both funds and spheres of influence between agencies or between parts of some agencies.

The Developmental Disabilities Services Act of 1971

has been transmitted to state levels. The North Carolina Department of Mental Health is the designated agency for implementation in North Carolina. The North Carolina Council on Mental Retardation has been reorganized and expanded and renamed North Carolina Council on Developmental Disabilities. It will act as an advisory board to the North Carolina Department of Mental Health regarding programs, services and facilities to be funded under this Act.

The Council will have several subcommittees dealing with prevention, diagnosis and evaluation, treatment, training, education and legislation.

For the immediate future, the federal guidelines will limit DDSA monies to epilepsy, cerebral palsy and developmental retardation. Expansion to include specific learning disabilities is expected to occur in one to two years.

This Subcommittee is aware of the continuing needs and the unfulfilled rights of the emotionally disturbed, developmentally retarded and otherwise handicapped infants, children and youth in the State of North Carolina. It will continue to monitor as many of the current widely diverse approaches to solution or satisfaction of the problems as possible. These include prevention, early detection and evaluation, adequate treatment and follow-up, day care, education and recreation.

If an issue arises that merits the attention of the Mental Health Committee and/or the Society as a whole, this Subcommittee will do its best to bring such an issue into focus.

Alanson Hinman, M.D., Chairman

COMMITTEE ON NECROLOGY

The *Memorial Services* scheduled for Sunday, May 21, 1972, at the opening session of the HOUSE OF DELEGATES constitutes the report of the Committee on Necrology.

W. Otis Duck, M.D., Chairman

COMMITTEE ON NEGOTIATIONS

The Committee on Negotiations has had no requests for negotiating procedure and, therefore, has held no meetings during the fiscal year.

William F. Hollister, M.D., Chairman

COMMITTEE ON NOMINATIONS

Thomas B. Dameron, Jr., M.D., Chairman

(Report of Nominating Committee given in House of Delegates, Sunday, May 21, 1972)

NORTH CAROLINA ASSOCIATION OF MEDICAL ASSISTANTS

The North Carolina Association of Medical Assistants had a very successful year for 1971. The organization is expanding in membership and enthusiasm. Many of the members are attending classes and courses which will lead to their certification in their specialty. I have been advisor to the NCAMA for 3 years and each year I am more impressed with the fine work that this organization is doing and the fine quality in membership that this organization is getting.

The Annual Meeting of the NCAMA was held in

Durham on October 23-24, 1971. I thought this was one of the best annual meetings that I have attended. I have nothing but praise for this organization and I think that their work is a definite asset to the medical profession in North Carolina.

Emmett S. Lupton, M.D.

COMMITTEE ADVISORY TO N. C. DEPARTMENT OF MOTOR VEHICLES

This committee met once which was during the Conclave in September, 1971. The activities have continued to center around two functions:

1. Review of the records of drivers with questionable medical status. This continued at an even more rapid rate and is functioning well. The panel has become stable in that additions to it are seldom required.
2. Considerable activity was observed during the year with respect to the National Driver Research Center which is to be located in the Research Triangle. The charter is written, the organization is incorporated, the trustees have been appointed, and money raising efforts are very active.

Jesse H. Meredith, M.D., Chairman

COMMITTEE TO WORK WITH NORTH CAROLINA INDUSTRIAL COMMISSION

The annual meeting of the Committee was held at the Committee Conclave at Mid Pines in September 1971. During the year we have continued to assist the Medical Director of the Industrial Commission, Dr. John W. Morris, in settling fee disputes and have continued, by means of discussion with the Chairman of the Industrial Commission, to urge the abolition of the fee schedule and the adoption of usual and customary fees.

The Industrial Commission at the present time is reluctant to make any changes in current procedure pending the outcome of a federal congressional investigating committee which is in the process of studying workmen's compensation laws and which plans to make recommendations to Congress for possibly establishing federal guidelines for state workmen's compensation laws. Mr. J. Howard Bunn, chairman of the Industrial Commission, has advised us that the report of this Congressional committee will be out in the late spring of 1972 and that possibly after this is reviewed proposed legislation can be drawn up, if such is desired, for the 1973 session of the North Carolina General Assembly. Our Committee has advised Mr. Bunn that Oregon has recently done away with its fee schedule and has begun paying physicians on the basis of usual fees for medical services to injured workmen. We have also advised Mr. Bunn that with the present price control regulations in effect the present time would be a golden opportunity to institute usual and customary fees in North Carolina. At this time they have made no decision in this regard.

J. S. Mitchener, Jr., M.D., Chairman

NORTH CAROLINA COMMITTEE ON PATIENT CARE

(No report received)

COMMITTEE LIAISON TO THE NORTH CAROLINA PHARMACEUTICAL ASSOCIATION

This Committee held one meeting during 1971. This meeting was held during the Committee Conclave in Southern Pines, on September 23, 1971. Some of the actions of this meeting were:

Mr. Frank Yarborough, pharmacist on the staff of the Department of Social Services reported to the committee on the Pharmacy Law regarding unauthorized dispensing of drugs, stating that it is illegal for a physician to delegate to a nurse or office attendant the task of compounding and dispensing or selling of retail drugs or medicine. It was suggested that this information be published in the PR Bulletin as information to all North Carolina doctors.

The Committee reviewed new applications and those previously approved of the doctors dispensing drugs under Medicaid.

It was reported that there had been some abuses by physicians in dispensing drugs under Medicaid. The Committee approved a motion that these abusers names be brought to the attention of the committee chairman and also passed on to the Peer Review Committee of the Medical Society.

The Committee approved a motion that the Executive Council support the proposal of the Department of Social Services for a pharmacy reimbursement program for utilization control, with notification to the Chairman of the Board of Social Services regarding this action.

The plan for payment of prescription service that was endorsed by the Committee for pharmacists of North Carolina and passed by the Social Services Department of North Carolina is now in effect.

I have received several communications about the matters pertaining to this committee from the headquarters' office in Raleigh which were handled by me directly as chairman, or was received by me as information and required no action.

Charles W. Byrd, M.D., Chairman

COMMITTEE ON OCCUPATIONAL AND ENVIRONMENTAL HEALTH

The Committee on Occupational and Environmental Health of the Medical Society of the State of North Carolina has worked diligently during the preceding year on the preparation of an innovative occupational health program and has prepared a proposal which was favorably endorsed by the Medical Society of the State of North Carolina at its Executive Council meeting on January 30, 1972. The proposal:

A Proposal for an Innovative Occupational Health Program as Recommended By the Committee on Occupational and Environmental Health of the Medical Society of the State of North Carolina

I. *Introductory Comments*—Historically, the concept of the Committee's involving itself in an effort to provide a method for delivering health care to smaller industrial units finds its background in the minutes of the meeting of the Committee on Occupational Health, September 30, 1967, under the Chairmanship of Dr. Donald Weir. In essence, it was recognized that most employees in this (and other) States work in estab-

lishments employing less than one hundred persons and, therefore, in plants which do not find it economically feasible to hire full-time physicians. It was further noted that increasing pressures by congress and labor were in process to enact legislation requiring industry to provide for the safety and health of its employees and that this in turn would place the burden upon management to implement expanded safety and health efforts. The Committee passed and presented to the Executive Council of the Medical Society of the State of North Carolina a proposal for a pilot project under the direction of one or more County Health Directors in conjunction with the County Medical Societies. No specific action was undertaken at that time by the Council inasmuch as no detailed proposal had been provided.

At its meeting of September 27, 1969, attention was again called to this proposal and it was discussed at several additional meetings of the Committee as guests of the School of Public Health at the University of North Carolina. Dr. Fred Mayes, Dean of the School of Public Health, undertook through his department to provide an outline detailing the considerations inherent in such a proposition. This outline was prepared by Dr. H. A. Tyroler, January 5, 1970.

Subsequent to this, there have been a number of meetings between various members of the Committee with individuals representing other disciplines involved, to wit, industrial management, industrial associations, county health personnel, physicians involved in industrial medical care, and educators.

It has been noted that considerable interest in, and, indeed, enthusiasm for this project is present and has been enhanced by the enactment of the National Occupational Safety and Health Act. Indeed, it has been found that industry is asking physicians for help both in the interpretation and implementation of this legislation.

II. *Objectives*—It is the supposition of the Committee that a project of this sort could provide for:

1. A need not presently met by the private sector of medicine: but it is felt that the services provided should be *supplemental to* and not *in lieu of* what is provided by private practitioners.
2. A method of specifically identifying and cataloging the needs of industry for feedback to the educational centers in order that educators may make provision for training personnel to meet these needs in the future and
3. A model which, if successful, could be implemented in other counties throughout the State for the betterment of the working man and industry as a whole.

As a by-product of this project, and, specifically of its endorsement by the Medical Society of the State of North Carolina, it is felt that organized medicine, by taking the initiative, will find itself in a more positive position in the public eye than would be the case should governmental or labor efforts provide alternative provisions for enactment.

III. *Implementation*—After considerable deliberation and discussion with those involved in the preliminary planning of this proposal, it is the opinion of the Committee that the project is one which is multifaceted, involves a number of different disciplines, and should

most appropriately be identified with an educational institution and environment.

IV. *Proposal*—The Committee on Occupational and Environmental Health, therefore, makes the following proposals to the Executive Council of the Medical Society of the State of North Carolina:

1. That the MSSNC endorse an effort to provide an Occupational Health Programs project.
2. That the pilot program be in Guilford County.
3. That the pilot program be under the auspices of Guilford Technical Institute.
4. That the pilot program be a coordinated effort involving all of the inter-related agencies and organizations whose services and efforts are involved in delivering health care to industry.

V. *Comment*—The Committee envisions that a properly executed pilot project of this sort involves the harmonious inter-relationship of many county and state organizations and can best be represented diagrammatically by a wheel whose hub is the project and whose spokes represent the institutions whose support is involved and whose feed-back represents progress in the delivery of health care to industry and preparation for future needs. Though it would be premature to firm-up its organizational structure, the Committee envisions this might be diagrammatically as follows:

VI. *Recognition*—The Committee wishes to express to the Executive Council of the MSSNC appreciation to the following individuals whose efforts, ideas, and general support have been of immeasurable value:

Dr. Fred Mayes and the UNC School of Public Health

Dr. H. A. Tyroler—UNC School of Public Health
Dr. Sarah Morrow—Guilford County Health Department

Dr. Austin Fortney—Jamestown, North Carolina

Dr. Luther Medlin—Guilford Technical Institute

Dr. Robert Dinkle—Greensboro, North Carolina

Mr. Henry Foscoe—Southern Furniture Manufacturers Association

Mr. W. W. Wilson—Piedmont Associated Industries

Mr. Roscoe Adams—Wachovia Bank, High Point, N. C.

Mr. White Watkins—Globe Furniture Co., High Point, N. C.

Mr. Jesse Campbell—Heritage Furniture Co., High Point, N. C.

Mr. Ben Smith—Model Cities Commission, High Point, N. C.

In addition, at its regular meeting, the Committee has embarked upon the preparation of a statement for the Society on environmental health and participated in the AMA Council on Environmental and Public Health at its Atlanta meeting.

The work of North Carolinians through the Department of Public Health, the Research Triangle, and through various industrial facilities on the problem of byssinosis has been one of continuing concern to the Committee. Various members of the Committee have reported regularly regarding this problem and have kept us well informed as to the progress being made in its solution.

John L. Brockmann, M.D., Chairman

COMMITTEE ON PEER REVIEW

The Peer Review Committee met for the first time at the Annual Conclave of Committees of the Medical Society in September 1971. The Committee was composed of the chairmen of several committees which had been involved with claims review and with other aspects of Peer Review in the State Medical Society in past years. An attempt was also made to include representation from the various specialty sections of the State Medical Society in order to aid in carrying out the assigned functions of the Peer Review Committee as outlined by the Executive Council to be concerned with the improvement of the quality of medical care in North Carolina.

The Peer Review Committee at this meeting recommended to the Executive Council of the Medical Society that a subcommittee be set up to give the Executive Council a proposal for a Peer Review Foundation which would serve as a statewide organization to coordinate the Peer Review efforts of the various county medical societies and of the various specialty societies within the State. It was the feeling that this committee should also be involved with the establishment of parameters for medical care both on an outpatient and an inpatient basis. The subcommittee is to report to the Executive Council at its meeting in January 1972.

John Glasson, M.D., Chairman

COMMITTEE ON PERSONNEL AND HEADQUARTERS OPERATION

The Headquarters Staff at the request of the North Carolina Society of Internal Medicine has extended its services to this society. We also began printing the Medical Auxiliary Newsletter. Other medical organizations will be served as staff time permits.

The Committee along with President Styron and Mr. Hilliard are considering the report by Mr. Gerald W. Frawley on the continuation of the review of Headquarters Office operations and reorganization efforts.

The Council at its January 30, 1972, meeting approved the employment of a second Field Representative. Interviews are being conducted.

The Headquarters Building is now leased and except for a few change orders it is complete.

A. Hewitt Rose, Jr., M.D., Chairman

COMMITTEE ON PHYSICAL & VOCATIONAL REHABILITATION

The Committee on Physical & Vocational Rehabilitation has met and discussed the problems of financing particularly through Vocational Rehabilitation Agency and the problems that this presents in getting patients treated throughout the State.

The statewide plan for rehabilitation centers in Asheville, Charlotte, Winston-Salem, Chapel Hill, Greenville, and Fayetteville have been reviewed by the committee. No specific action has been taken by the committee on this. No special projects have been carried out.

The scope and function of the committee essentially to review the programs of physical and vocational rehabilitation in the State bringing this information back to the Medical Society when necessary, making recommendations.

recommendations to the various aspects of physical and vocational rehabilitation to the Medical Society.

It is hoped that in the near future some projects can be developed to give a more widespread knowledge of the rehabilitation activities in the State to the practicing physicians in the State.

E. H. Martinat, M.D., Chairman

COMMITTEE OF PHYSICIANS ON NURSING

The Committee of Physicians on Nursing met on September 25, 1971 with Acting Chairman, John N. Bennett, M.D., presiding. After lengthy discussion the following motion was passed unanimously:

THAT THE COMMITTEE SUPPORT THE FORMATION OF THE PROPOSED STATEWIDE JOINT PRACTICE COMMITTEE BETWEEN MEDICINE AND NURSING AND THAT A MEMBER OF THIS COMMITTEE BE APPOINTED TO THAT COMMITTEE TO IMPROVE COORDINATION.

The following resolution was recommended to the Executive Council of the Medical Society:

WHEREAS, Dr. Harry L. Brockmann has participated faithfully over a number of years with the Committee of Physicians on Nursing of the Medical Society of the State of North Carolina, and

WHEREAS, he has given active and aggressive leadership to improving nursing practice in North Carolina, and

WHEREAS, his loss is not only for medicine but for improved nursing in North Carolina; therefore, be it,

RESOLVED, that the Committee of Physicians on Nursing and the Executive Council of the Medical Society of the State of North Carolina extend to Mrs. Harry L. Brockmann our deepest concern and appreciation for the fine services that he has performed.

Mrs. Evelyn Auld, R.N., of Wilson, North Carolina was selected *Nurse of the Year* and was honored in appropriate fashion. The Committee laid plans for the election of the NURSE of the YEAR once again in 1972.

W. Benson McCutcheon, Jr., M.D., Chairman

Planning Board of United Community Services, Representative on:

I attended three of the four meetings. I am not sure why "we" are represented. The major purpose seems to be how to raise money, how to build the organization, and more recently—how to move into the field of drug abuse and the Florence Crittenton Homes. I suspect their next step will be in HMOs.

William A. Robie, M.D., Representative

Medical Society Consultant on Podiatry

No new business or information has come before this consultant for opinion or evaluation, during the year of 1971.

Donald B. Reibel, M.D.

COMMITTEE ON PROFESSIONAL INSURANCE

The Committee on Professional Insurance has not changed its function nor *modus operandi* since the previous report of last year. We meet with representatives of the St. Paul Insurance Company approximately three or four times a year in an attempt to keep down liability insurance rates.

A summary of the functions and objectives of this Committee was sent on November 13, 1971 in response to a request from the headquarters office.

John C. Burwell, Jr., M.D., Chairman

COMMITTEE ON PUBLIC RELATIONS

The Committee on Public Relations met at the Mid Pines Club in Southern Pines on September 23, 1971 and planned the year's activities as listed below:

1. Continued the PUBLIC RELATIONS BULLETIN and made specific recommendations as to how it might better serve its function and purpose.

2. Continued the exhibit at the 1971 North Carolina State Fair.

3. Continued the High School Science Fair project with the following slight change—the winner is to receive a \$50 award at the 1972 Science Fair and is to be given a certificate at a subsequent meeting of the county medical society in the county in which he resides.

4. Continued the project to give an award to the winner of the North Carolina Rescue Squad First Aid competition.

5. Began updating the "Information Packet for Physicians." This is being continued and hopefully will be completed in the near future.

6. Conducted an AMA Leadership Seminar, under the direction of Dr. Josephine Melchoir for 27 participants, including one medical student. Invitees for the Seminar were recommended by the Executive Council of the Medical Society. This is the largest number of participants to attend one of these Seminars.

7. Conducted a Conference for Medical Leadership on January 28 and 29, 1972, in Pinehurst with a total registration of 212 including 136 physicians in attendance—the largest number of physicians ever attending one of these midwinter officers' conferences. The Woman's Auxiliary held their Midwinter Officers' Conference concurrently, but scheduled so as to participate in the Leadership Conference of the Medical Society also.

8. Continued previous policy of distributing MEDICAL NEWS and TODAY'S HEALTH to the Governor, Members of the Council of State, Supreme and Superior Court Judges and members of the North Carolina General Assembly.

9. Encouraged initiation of a Joint Conference for Hospital Trustees, Administrators and Hospital Medical Staffs with Dr. Ernest Page serving as Chairman. The Conference was held on Friday, January 28, 1972, in Pinehurst immediately preceding the Conference for Medical Leadership.

10. Revitalized the program to encourage county medical societies to appoint Public Relation Committees to work toward the following 1972 objectives:

- a. develop programs to improve accessibility of emergency and non-emergency medical services

- b. invite members of the communications media to a special meeting of the county medical society
- c. serve as the spokesman for your society when organized medicine is being criticized unjustly

11. Undertook project to distribute monthly health news tips to the news media on a variety of seasonally adjusted health educational topics.

12. Cooperated with the new AMA National Communications program by distributing with the help of the Auxiliary two posters: "The Day Everybody Tried to See the Doctor" and "How to Kill Yourself" for display in physicians' offices, hospitals and health clinics.

13. Recommended, in order to improve communications between the county and the state levels, that county medical societies' secretaries send copies of the minutes of their meetings on a regular basis to the headquarters office of the Society.

14. Planned a follow-up meeting of the Public Relations Committee for Sunday, March 19, 1972, at which time the additional topics are to be considered:

- a. support for project to improve health education in physician's offices.
- b. consider feasibility of preparing an anatomical gift program in North Carolina.
- c. consider methods for improving health care accessibility.

Appreciation is expressed to President Charles W. Styron, Mr. William N. Hilliard, Mr. Dan Mainer, Mr. Bryant Paris and Mrs. LaRue King for the excellent service they and other members of the Headquarters Staff have given this year in the performance of the activities of the Public Relations Committee. The Public Relations Committee is indebted to these fine folks for the program of the Committee.

John L. McCain, M.D., Chairman

COMMITTEE ON RADIATION

No unusual irradiation has come to my attention during the past year.

Waldemar C. A. Sternbergh, M.D.

COMMITTEE ADVISORY TO STUDENT AMA CHAPTERS IN NORTH CAROLINA

The Committee has not met this year nor done anything of significance. It has served as advisory to the Student AMA Chapters in North Carolina.

C. Douglas Maynard, M.D., Chairman

COMMITTEE ON RELATIVE VALUE STUDY

The Committee on Relative Value Study of the Medical Society of the State of North Carolina again had a very busy and productive year. Numerous consultations were held with members of insurance companies and with Dr. Burgess L. Gordon, Editor of *Current Procedural Terminology*, American Medical Association. Also many productive conversations and exchange of letters were carried out with members of the State Medical Society. Constructive criticisms and suggestions were offered by the members and were of great help to the Committee on Relative Value Study.

The main yearly meeting was held Friday, Septem-

ber 24, 1971, at the Mid Pines Club, Southern Pines. After review of the previous year's activity, a comprehensive discussion was held concerning the new CPT 5 digit system and the Blue Cross four digit system. It was pointed out that both systems will be utilized in the new hand books. It was voted that the early winter meeting be held to initiate the new North Carolina Relative Value Schedule. The sections on orthopedic surgery and cardiovascular surgery have already updated their section to include new procedures and to correct obvious inequities. The responsible parties in each section at the winter meeting will be presented with the copies of the California Relative Value Schedule, the new AMA Current Procedural Terminology Manual and the 1964 North Carolina Relative Value Schedule. It would be up to each section to determine changes for the new Relative Value Schedule.

Again, it was emphasized that the Relative Value Schedule in no way represents a fee schedule. It simply represents a guideline for the determination of the relative value of a certain procedure determined by a specific individual. The fee rendered by the individual clinician is a purely personal responsibility.

The new Relative Value Schedule is expected to be ready for publication later on in 1972.

Arthur E. Davis, Jr., M.D., Chairman

COMMITTEE ON RETIREMENT SAVINGS PLAN

The Committee on Retirement Savings Plan is happy to present its report for the year 1971.

The North Carolina Medical Retirement Savings Plan, with Wachovia Bank & Trust Company, N.A., a trustee completed its 5th full year of operation, having been launched very late in 1965. This Keogh plan for physician members and their employees is one of the few so-called "Doctors Plans" and had its planning inception as far back as 1959.

The committee has observed a variance in the attitudes of physicians on the purpose of a retirement savings program. It has observed some physicians going into various programs, many of which are sold by insurance companies, banks, stock brokers and mutual funds, and with equally diverse investment objectives.

There are 2 investment avenues available in The North Carolina Medical Retirement Savings Plan (1) the Stock Fund and (2) the Insured Annuity Plan. A member may participate in each to the percentage he desires. Most have chosen the Stock Fund as a vehicle.

Two milestones were passed by the PLAN in 1971 (1) For the first time retirement benefits payouts were begun to 2 physicians. (2) Also, the total assets of the Stock Fund passed 1 1/2 million dollars and closed on 12/31/71 at \$1,636,475.46. During the last month of the year \$121,557.08 was deposited by participants which is about 6 times the usual monthly deposits.

In October a business reply card was included with the Public Relations Bulletin sent to each member. This card was to be used if a member desired information on the Society's Plan. More than 250 cards were returned and these physicians were contacted by Wachovia and each received a letter from the chairman of the Committee.

There were 2 other observations, one negative and one positive. (1) As physicians incorporate they have been withdrawing from the PLAN. (2) The Treasur-

Department has recommended to congress that the tax referred amount be raised from a maximum of \$2,500 \$7,500.

The PLAN is live and well.

Jesse Caldwell, M.D., Chairman

COMMITTEE ON SCIENTIFIC AWARDS

The report of the Committee on Awards will be presented at the Third General Session, May 24, 1972, which time medals and certificates will be presented to the essayists selected by the Committee as award winners.

F. M. Simmons Patterson, M.D., Chairman

COMMITTEE ON SCIENTIFIC EXHIBITS

The Committee on Scientific Exhibits met during the Committee Conclave at Southern Pines, North Carolina September 24, 1971. It was noted that scientific exhibits are increasingly hard to obtain because of increasing costs to the exhibitor and austerity programs of the medical schools involved. Therefore, the Commissioner was asked to make the following recommendations to the Executive Council:

1. Official photographer to snap pictures at random the exhibit hall for later use.
2. That the following people be invited and urged to attend the Exhibitors' Party: (a) Officers; (b) Counors; (c) Commissioners; (d) AMA Delegates and alternate Delegates; (e) Committee on Scientific Exhibits; (f) Committee on Public Relations.
3. Official photographer to snap pictures during the exhibitors' Party.
4. Immediately after the Annual Meeting, a one sheet *NEWS NOTES* should be printed on the Annual Meeting with information on exhibits, attendance figures, pictures of the exhibit area, exhibitors' party, etc. This *NEWS NOTES* is to be mailed to all exhibitors who attended the meeting.
5. A copy of this *NEWS NOTES* is to be enclosed with the letter of invitation and prospectus to each exhibitor for the 1973 Annual Meeting.
6. That the Medical Society assume the financial responsibility of any extra lighting needs for scientific exhibits.
7. That each specialty section chairman ask each member of his section to visit both scientific and technical exhibits during the Annual Meeting.

The Commissioner carried these recommendations to the Executive Council and all were unanimously approved.

As of this date the Committee on Scientific Exhibits has accepted twenty exhibits for showing at the 1972 Annual Meeting.

Josephine E. Newell, M.D., Chairman

COMMITTEE ON SCIENTIFIC WORKS

The Committee on Scientific Works arranged the program for the three General Sessions scheduled for Monday, May 22, Tuesday, May 23 and Wednesday,

May 24, of the 118th Annual Session of the Medical Society, scheduled for May 20-24, 1972, The Carolina, Pinehurst, North Carolina.

Arthur E. Davis, Jr., M.D., Chairman

COMMITTEE ON SOCIAL SERVICE PROGRAMS

The Committee on Social Service Programs met July 29, 1971 in the Headquarters Office at the request of the President Dr. Charles W. Styron. In addition to the Committee, there was the Executive Committee of the Society and representatives of the North Carolina Blue Cross Blue Shield. The purpose of the meeting was to attempt to cope with a few violators, from the Society, of fee schedules and over-utilization.

Some guidelines were drawn up and discussed. These were later revised, re-discussed and passed at the Committee Conclave in September. This information was passed on to the Society in the President's Newsletter.

At the September meeting, Mr. Emmett Sellers from the N. C. Department of Social Services met with the Committee. Numerous discussions involving Medicaid, delivery of care, fees, etc., were discussed. Mr. Sellers attempted to clarify misunderstandings, but emphasized that his Department was working under Federal laws and all employees of his Department had to obey the laws and regulations.

A resolution was passed, approving some changes recommended by the North Carolina Pharmaceutical Association in the filling and refilling of prescriptions under Medicare and Medicaid. These changes were aimed at pharmacists who were "splitting prescriptions."

The Committee endorsed several proposals of the Governor's Advisory Committee to Social Services, which was presented by Dr. E. T. Beddingfield. A resolution supporting these proposals was drawn up for presentation to the Executive Council.

Since the implementation of the guidelines for Blue Cross Blue Shield, adopted in September 1971, the President, the Committee, and headquarters office have been bombarded with complaints relative to injections.

The guideline states: it will be the policy of the Medicaid Program to decline reimbursement for parenteral medication when oral medications are deemed adequate by Medicaid physician consultants. When injected drugs are utilized, an explanation as to the reason, the name of the drug, and dosage are to be entered on the claim form.

Because of the frequency of complaints, a meeting has been scheduled of the Committee, together with the Executive Committee and representatives of Blue Cross Blue Shield on February 29, 1972. It is hoped that more acceptable guidelines will come out of this meeting.

It should be stated that through the efforts of the President and other officers of the Society, the Department of Social Services of North Carolina has agreed to continue to retain the North Carolina Blue Cross Blue Shield organization as fiscal intermediary for the Medicaid program through 1972.

Charles B. Wilkerson, M.D., Chairman

ad hoc COMMITTEE FOR SPECIALTY REPRESENTATION IN THE HOUSE OF DELEGATES

The ad hoc Committee for Specialty Representation in the House of Delegates has had no additional meetings.

Our report was rendered at the September 25, 1971, session of the Executive Council and was printed in those minutes. The exact wording of the recommendation is as follows:

That each specialty section, as provided in the Bylaws of the Medical Society of the State of North Carolina, elect a delegate to the House of Delegates.

It is my recollection that this was to be an item on the Agenda for action by the House of Delegates at the May session.

Chalmers R. Carr, M.D., Chairman

COMMITTEE ADVISORY TO STUDENT AMA CHAPTERS IN NORTH CAROLINA

The Committee has not met this year nor done anything of significance. It has served as advisory to the Student AMA Chapters in North Carolina.

C. Douglas Maynard, M.D., Chairman

COMMITTEE ON UTILIZATION

The Utilization Committee met at 2:00 p.m., September 24, 1971, at Mid Pines. Dr. J. McNeely Dubose acted for Chairman H. Fleming Fuller who could not be present because of illness.

An indepth review of the Utilization Review Committee's activities throughout the state during the past year was carried out. Many of the Committees are still meeting and reviewing charts just to conform to the law of the land with little desire to carry out the real function of the Committee. Work needs to be done in educating individual hospital staff members as to the real purpose of the Utilization Review program. The Committee should be looked upon as a vital aid in relieving the ever present crisis of bed shortage and not as a police monitoring group. It was suggested that the county medical societies become involved in Utilization Review problems in this particular area.

Extended care facilities by law must have a periodic medical review carried out. It was suggested that a professional team from the state working in conjunction with the local physicians appointed by the county medical society carry out this function.

Blue Cross and Blue Shield together with our other carriers desperately need all help possible in curtailing over-utilization both on an outpatient and an inpatient basis. Blue Cross and Blue Shield has already instigated a new approach to review of utilization with some of the larger groups. Representatives from management, labor, as well as physicians and hospitals in the area are brought together and given the facts in current over-utilization. It is hoped that this plan will be of help with this particular problem.

An acute shortage of hospital beds continues to exist in most of our hospitals throughout the state. A well-functioning, conscientious Utilization Review Committee is the most important factor in helping alleviate this

shortage. Representative from the State Board of Health as well as our carriers stand ready and are anxious to help the Medical Society at all times in this very vital matter.

H. Fleming Fuller, M.D., Chairman

ad hoc COMMITTEE ON THIRD PARTY PAYORS

J. Elliot Dixon, M.D., Chairman

(report not received 4/6/72)

AD HOC COMMITTEE ON CONSTITUTION AND BYLAWS

As charged by the House of Delegates, the Committee has begun rewriting the Constitution and By-Laws. It has to date a rough draft of a constitution which contains the essentials of organization and function of the Society, but omits details which more properly belong in the bylaws. Because of the time necessary for consideration of the many details involved in formulating these new documents, it is not anticipated that they will be ready in time for any consideration by the House of Delegates this year.

Louis Shaffner, M.D., Chairman

NORTH CAROLINA BOARD OF MEDICAL EXAMINERS STATISTICS

November 1, 1970-October 31, 1971

Total number applicants granted license.....	52
By endorsement of credentials.....	353
By written examination.....	175
Examination failures	2
Flex	23
Part II	6
Limited license	2
Hospital residents	1
County or counties.....	28
Resident's Training License.....	21
Applicants rejected license by endorsement of credentials.....	
Did not meet requirements of the Board	
Applicants declined permission to take written examination	
Hearings	2
Over utilization of the Welfare Drug Program	1
Drug addiction	10
Mishandling of drugs.....	11
Applying for BNDD number.....	5
Petitioning for reinstatement of narcotic tax stamp.....	1
License to practice medicine revoked, judgment suspended	
Narcotic addiction	
Surrender narcotic tax stamp.....	

Recommend reinstatement narcotic tax stamp	0
Declined reinstatement narcotic tax stamp.....	1
License to practice medicine reinstated, probationary basis	1
Investigation by SBI.....	4

Scholarships for Medical and Related Health Studies

Recipients of the Commission's educational loans agree upon completion of their training to repay their loans by one calendar year of service for each year they received funds. In 1971, the number of applications approved rose 28.1% over 1970 with 337 recipients entering the program. Among the new recipients were 59 medical students and 156 nursing students. A total of 609 students enrolled in medical and related courses are now supported by the Commission. An additional 113 are in deferred status (postgraduate-training, military service or sick leave) providing a potential health manpower contribution of 722 recipients. During 1971, 151 loan recipients were added to practice categories in North Carolina.

THE NORTH CAROLINA MEDICAL CARE COMMISSION

Report on Activities for the Calendar Year Ending December 31, 1971

Medical Facility Planning and Construction

During 1971, 41 medical projects were underway costing \$152 million—representing 25 hospital facilities providing 1,840 additional beds to the State, 1 nursing home, 1 public health center, 7 mental health centers, 5 facilities for the mentally retarded, and 2 rehabilitation facilities. In addition to these, the Commission has been readying during the year 8 other health facility projects estimated to cost \$43 million that can start when Federal appropriations are released.

NORTH CAROLINA RANKS SECOND AMONG ALL THE STATES IN THE NUMBER OF HEALTH FACILITY PROJECTS CONSTRUCTED UNDER THE HILL-BURTON ACT.

Hospital Licensure and Certification

During the year, 156 hospitals involving 22,511 beds were licensed as meeting the Commission's standards for patient care and safety. Many of these received consultation by the Commission to help them retain eligibility to admit patients under the Medicare and Medicaid programs. The number of hospitals complying with Federal criteria represents 97% of the total in operation.

Physicians Members:

J. Street Brewer, M.D.
John F. Lynch, Jr., M.D.
Hugh F. McManus, Jr., M.D.

I. O. Wilkerson, Jr.
Acting Executive Secretary

Summary of Minutes of Meetings of the Executive Council

NOTE: As recommended by the Finance Committee, the Executive Council authorized that just the salient actions of the Executive Council will be reported in brief form.

The verbatim transcript of the Executive Council minutes are on file in the Headquarters Office and may be reviewed or pertinent portions excerpted on request.

FALL EXECUTIVE COUNCIL MEETING

September 26, 1971

(Morning Session)

—The Fall Meeting of the Executive Council convened at 9:00 a.m. in the Meeting House of the Mid Pines Club, Southern Pines, N. C., President Charles W. Styron, presiding.

—Doctor Styron recognized guests present and Secretary E. Harvey Estes, Jr., declared a quorum. Mrs. Ruby Byrum, President of the Auxiliary to the Medical Society of the State of North Carolina, presented a brief report on Auxiliary projects and accomplishments.

—Dr. T. Tilghman Herring, Chairman, Committee on Finance, presented the proposed budget for 1972. It was adopted by the Council. See separate REPORT A—REPORT OF THE EXECUTIVE COUNCIL, page 59, HOUSE OF DELEGATES, May 21, 1972.

—The Council authorized the expenditure of necessary funds up to \$2,500 for the planned dedication ceremonies of the new Medical Society Building to be held on Sunday, October 10, 1971, based on the plan of the dedication presented by Dr. John S. Rhodes.

—The Council approved a recommendation of the Committee on Legislation that a Reception and Open House for members of the General Assembly be held on Thursday, October 28, 1971.

—The Executive Council, following a request for interpretation by the Chairman of the Mediation Committee, Dr. Frank W. Jones, approved a motion that the Council interpret Chapter X, Section 9, paragraph G, of the Bylaws verbatim that no person other than a committee member or witness being heard shall be present. The Council also approved and referred to the Committee on Constitution and Bylaws several changes in this section of the Bylaws as suggested by the Mediation Committee.

—The Council on Review and Development recommended, and the Executive Council endorsed, that it be the policy of the Society to approve the pluralistic system of medical care making the policy of this Society consistent with that of the American Medical Association, but that this not be in opposition to experimental pilot projects in new systems of health care. See separate REPORT B—REPORT OF THE EXECUTIVE COUNCIL, page 63, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council approved two recommendations concerning the Annual Meeting of the Society, presented by the Council on Review and Development, as follows:

- 1) That the Annual Meeting include two General Sessions instead of the present provision that there be held at least one General Session daily.
- 2) That the first meeting of the House of Delegates be held on Friday and the second on Sunday, with the Reference Committee hearings being held on Saturday.

In approving these recommendations, the Executive Council took into consideration the fact that it might take several years to effect these changes due to meeting space reserva-

tions already scheduled. See separate REPORT C—REPORT OF THE EXECUTIVE COUNCIL, page 63, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council endorsed a recommendation from the Council on Review and Development that it be interpreted that the charge to the Committee on Constitution and Bylaws given to them by the House of Delegates in 1971 encompasses a rewriting of the Constitution and Bylaws without alterations of the philosophy and intent of the present Constitution and Bylaws.

—The Executive Council received and acted favorably on a recommendation from the ad hoc Committee on Specialty Representation in the House of Delegates, that each specialty section, as provided for in the Bylaws of the Medical Society of the State of North Carolina, elect a delegate to the House of Delegates. The Council referred the recommendation to the Committee on Constitution and Bylaws.

—The Executive Council approved and referred to the Committee on Constitution and Bylaws a request for change in name of the Section on Traumatology and Orthopaedics to Section on Orthopaed cs.

—The Executive Council approved a motion that the dues for Student Members be \$10 annually effective January 1, 1972. (This action was later reconsidered at the January 30, 1972 meeting of the Council following an appeal from several medical students and the dues for Student Members was reestablished at \$3 annually.)

(Afternoon Session)

—The subject of conflicts of interest in Medical Society committees was discussed by the Executive Council with the following motion adopted: "It is the opinion of the Executive Council that no physician should participate in the peer review of any case in which he has been a consultant, or has received or is eligible to receive remuneration from a third party payor." See separate REPORT D—REPORT OF THE EXECUTIVE COUNCIL, page 63, HOUSE OF DELEGATES, May 21, 1972.

—Approval was voted by the Council to a request by the Committee on Cancer relative to the distribution of a letter to private physicians still sending pap smears to the State Board of Health Cytology Laboratory telling them that after November 1, 1971, their slides would be returned without interpretation. This is in keeping with previously approved Society policy.

—A series of recommended changes in the Constitution and Bylaws referred to the Committee on Constitution and Bylaws by the 1971 House of Delegates were reviewed for Council comment. These will be presented by the Committee to the 1972 House of Delegates for action. See separate REPORT E—REPORT OF THE COMMITTEE ON CONSTITUTION AND BY LAWS, page 63, HOUSE OF DELEGATES, May 21, 1972.

—The Committee Advisory to the Department of Mot

Vehicles requested Council endorsing the health questionnaire that is presently used by the Department of Motor Vehicles in application for a North Carolina driver's license.

—A \$2,000 contribution to N. C. MedPac was authorized for the 1972 budget, by Executive Council action.

—The Committee on Maternal Health recommended, and the Executive Council endorsed, the guidelines for implementing a statewide uniform family planning program designed by the Task Force to Develop a Statewide Plan for Family Planning.

The Executive Council approved a recommendation from the Committee on Chronic illness that the Medical Society go on record as promoting the continuation of Home Health Services so that it may be extended into those counties not now participating in this program and that there be supportive dissemination about this to the roster of physicians in North Carolina.

—The Committee on Mental Health requested, and the Executive Council approved, that a representative from the Committee on Mental Health of the State Society be appointed to the advisory group of the North Carolina Society of Clinical Hypnosis.

The Executive Council approved a suggestion from the Committee on Marriage Counseling and Family Life Education that a letter be sent to County Medical Society Presidents to the effect that this committee approves the statewide family planning program and request each county medical society to respond to the July 1971 letter from the Department of Administration pertaining to that program.

—At the request of the Committee on Marriage Counseling and Family Life Education, the Executive Council voted its support to the proposal that the Committee Chairman write individuals on North Carolina College Campuses as follows: 1. Deans of Students, 2. Student Health Services, and 3. Presidents of Student Bodies, inquiring about student needs in the field of family life and sex education and also asking if they would be interested in speakers from the State Medical Society to discuss these needs with them.

—The Committee on Drug Abuse proposed, and the Executive Council endorsed, a Statement of Policy on Drug Abuse and Drug Dependency. See separate REPORT F—REPORT OF THE EXECUTIVE COUNCIL, page 65, HOUSE OF DELEGATES, May 21, 1972.

—The Committee on Child Health and Infectious Diseases recommended, and the Executive Council approved, that the Insurance Industry Committee of the State Medical Society attempt to come up with some way for major medical coverage for neonatal care.

—At the request of the Committee on Child Health and Infectious Diseases, the Executive Council approved a recommendation concerning the rubella immunization. See separate REPORT G—REPORT OF THE EXECUTIVE COUNCIL, page 66, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council gave its approval to a proposal that the Committee on Occupational and Environmental Health distribute a questionnaire to a sampling of industrial management in the High Point-Triad area seeking pertinent

data about the need for, and interest of industry in, the establishment of an industrial clinic.

—The Executive Council approved a draft of guidelines of what the Medicaid regulations will allow, prepared by the North Carolina Blue Cross and Blue Shield, Inc. Utilization Review Department and reviewed by the Committee on Social Service Programs of the State Medical Society which recommended it to the Executive Council.

—The Executive Council approved a recommendation by the Committee on Peer Review that the establishment of a statewide non-profit foundation for peer review of quality medical care in North Carolina be studied by the Executive Council. See separate REPORT H — REPORT OF THE EXECUTIVE COUNCIL, page 66, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council approved a motion that the Committee on Peer Review be asked to seek planning funds for the purpose of their activities. See separate REPORT H—REPORT OF THE EXECUTIVE COUNCIL, page 66, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council adopted a resolution presented to it by the Committee on Health Care Delivery as follows: That it be the Medical Society's policy:

1. To sponsor and recruit co-sponsors for a retreat to study health care delivery;
2. That it be the expressed policy of the Medical Society to encourage research, experiments, innovations, pilot model programs and new methods of health care delivery.

—The Committee on Arrangements recommended, in accordance with the recommendations of the Council on Review and Development, changing the Annual Meeting to a Thursday through Sunday meeting.

—The Committee on Arrangements recommended and the Executive Council approved, that the Society cease to finance transportation of SAMA members to the Annual Meeting because of the poor utilization of the buses provided.

—The Committee on Awards recommended and the Executive Council approved, the acceptance of the Wake and Moore County Medical Societies offer to provide a monetary award of \$100 each to be presented with the Wake and Moore County medal and certificate.

—The Committee to Work With the North Carolina Industrial Commission recommended and the Executive Council approved, that it be the policy of the Society to seek the authorization of usual and customary fees being paid by the North Carolina Industrial Commission and that the fee schedule be done away with.

—The Committee Liaison to the N. C. Pharmaceutical Association recommended and the Executive Council endorsed a proposed new method of payment for prescription drugs by the Department of Social Services of the State of North Carolina.

—The Executive Council appointed A. T. Pagter, M.D., of Tryon to fill the unexpired term of Kenneth E. Cosgrove, M.D., as Vice-Councilor for the Tenth District.

MID-WINTER EXECUTIVE COUNCIL MEETING

January 30, 1972

(Morning Session)

—The Mid-Winter meeting of the Executive Council convened at 9:00 a.m. in the South Room of The Carolina, Pinehurst, N. C., President Charles W. Styron presiding, and Secretary E. Harvey Estes, Jr., declaring a quorum.

—The Chairman of the Committee on Finance, Dr. T. Tilghman Herring, presented a financial report of 1971 operations. (See copy of the Auditor's Report in the Compilation of Annual Reports.) He also reported that the company which has previously taken an option on the

Durham Highway property did not renew the option and did not purchase the property.

—The Executive Council approved several revisions in the 1972 Budget as follows: (1) That \$600 be added to the existing budget for the Committee on Medical Aspects of Sports to put on a program similar to the one that was put on in 1971, with the recommendation that the Committee undertake to obtain outside financing also; and (2) A revision of the Budget for the current year (1972) to indicate the increased expected rental income and to provide for the employment of a second field representative. See separate REPORT A—REPORT OF THE EXECUTIVE COUNCIL, page 59, HOUSE OF DELEGATES, May 21, 1972.

—Reporting for a Sub-committee of the Committee on Peer Review, Doctor Estes presented a progress report of the activities of that sub-committee which has been exploring the advisability of a foundation for medical care and peer review. The Executive Council confirmed that a peer review foundation is needed and the sub-committee of the Committee on Peer Review was instructed to continue its work on development of proposed Bylaws and Articles of Incorporation and bring the information back to the Council. See separate REPORT H—REPORT OF THE EXECUTIVE COUNCIL, page 66, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council approved a recommendation from the Committee on Medicare, that the Executive Council request through appropriate channels that the Department of Social Services cause the Social Security number of each Medicaid recipient of medical services and drug stamps to be printed on such stamps when sent to these recipients.

—The Committee on Medicare reported to the Executive Council that it had reviewed cases identified as cases "A", "B", and "C" and was of the opinion that the practice pattern including many charges, represents unjustifiable expense to patient and/or insurance carrier and it is not acceptable medical practice. Following discussion of the recommendation of the Committee on Medicare, the Executive Council referred the cases "A", "B", and "C" to the Committee on Mediation for study and recommendation back to the Council.

—Approval was given to a request that the Executive Council submit to the House of Delegates its recommendation that a Section on Urology be added to the other existing sections. See separate REPORT I—REPORT OF THE EXECUTIVE COUNCIL, page 66, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council went on record as reviewing favorably and endorsing the proposal of the Committee on Occupational and Environmental Health for an Innovative Occupational Health Program (Model Industrial Clinic).

—A revised athletic participation form for parental consent and physical examination of students was again presented by Commission Chairman Dr. Rose Pully for the Committee on Medical Aspects of Sports with the Executive Council approving the form in principle. Several changes suggested by the Council are to be incorporated in the form and reported back to the Council.

—The Executive Council considered several proposals for redrawing the Districts as proposed by the House of Delegates in May 1971 so that the number of physicians in each district would be more equitable, but the Executive Council deferred any decision on the matter until the May Council meeting.

(Afternoon Session)

—The Committee on Nominations requested the Executive Council to interpret a portion of the Constitution and Bylaws, with the Council approving a motion to the effect that Council interprets Article IX, Section 1, (of the Constitution and Bylaws) as stating that no member may be re-elected to the Board of Medical Examiners.

—The Committee on Nominations submitted a proposal that membership on the Committee on Nominations be for terms of three years and that the terms be staggered. The Executive Council referred the proposal to the Committee on Constitution and Bylaws, but did pass a motion favoring a term of three years for the Committee on Nominations.

—May 7, 1972 was approved for the next meeting of the Executive Council, the Annual Meeting of the Executive Council, in lieu of meeting on the Saturday before the start of the Annual Sessions.

—The Executive Council voted its support of the North Carolina AMA Delegation's efforts to urge the AMA House of Delegates to reconsider a 1971 decision that the AMA Audio News Journal not include any scientific material, it being the sentiment of the North Carolina AMA Delegation that dissemination of scientific information was in keeping with the objectives of the organization.

—The nomination and endorsement of Dr. Donald B. Koonce for membership on the Joint Commission on Accreditation of Hospitals was endorsed by the Executive Council.

—The Executive Council voted to recommend to the House of Delegates that approval be given to the request that the counties of New Hanover, Brunswick, and Pender be organized as a hyphenated county medical society. See separate REPORT J—REPORT OF THE EXECUTIVE COUNCIL, page 66, HOUSE OF DELEGATES, May 21, 1972.

—On recommendation of the Seventh District Councilor, Dr. Charles L. Stuckey, approval was given to classify Dr. Angus M. McDonald of Charlotte, as a Life Member.

—On recommendation of the Seventh District Councilor, Dr. Charles L. Stuckey, and Past President Dr. David G. Welton, the Council approved that dues for the years 1968 through 1972 be waived for Dr. Dorothy N. Glenn, of Gastonia.

—Endorsement was voted by the Executive Council for the Student American Medical Association's Medical Education and Community Orientation (MECO) Project.

—The North Carolina Dietetic Association, Inc. Diet Manual was endorsed by the Executive Council.

—At the request of medical students, the Executive Council reconsidered the amount of dues for Student Members of the State Society and reestablished the annual dues at \$3 per year for Student Members.

ANNUAL EXECUTIVE COUNCIL MEETING

May 7, 1972

—The Annual Meeting of the Executive Council convened at approximately 9:00 a.m. in the Council Room of the Medical Society Building, Raleigh, N. C., President Charles W. Styron, presiding, Secretary E. Harvey Estes, Jr., called the roll and declared a quorum.

—President Styron indicated that Executive Council REPORT A through REPORT J as contained in the delegates kits are for referral to the House of Delegates, all having been considered by the Council.

—The Council reviewed the numbered Resolutions 1-10, which are automatically referred to the House of Delegates for consideration.

—The President called on each Councilor to determine if there were any additional reports to those printed in the Compilation of Annual Reports. In the absence of any additional Councilor reports the Annual Reports of Commissioners were considered next, without any additional reports being offered.

—Dr. J. Henry Carr, Chairman, Committee on Constitution and Bylaws, presented a number of proposed changes in the Constitution and Bylaws which were reviewed by the Executive Council and referred on to the House of Delegates. See separate REPORT OF THE COMMITTEE ON CONSTITUTION AND BYLAWS, page 57, HOUSE OF DELEGATES, May 21, 1972.

—Dr. Frank W. Jones, Chairman, Mediation Committee presented a report based on a review of information referred to it by the Executive Council at its January 30, 1972, meeting. The Mediation Committee recommended and the Executive Council approved that: It be the policy of the Society, henceforth, that all complaints originating from insurance carriers or intermediaries (third parties) dealing with improper utilization of services and facilities as well as inappropriate charges for services by physicians be first reviewed by one of the committees of the Society which perform peer review functions; and that only after the accused physician has been notified, appropriate hearing held, and an opinion rendered, should that committee refer the matter to the Mediation Committee for further opinion or recommendation for action. See separate REPORT K—REPORT OF THE EXECUTIVE COUNCIL, page 66, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council endorsed the recommendation of the Committee on Disaster and Emergency Medical Care that the responsibility for coordinating emergency medical care activities be reassigned to the State Board of Health.

—The Council also approved the landing of a military helicopter on the hotel grounds at Pinehurst during the Annual Meeting as a helicopter and disaster medical equipment display of how military helicopters can be utilized to provide assistance to civilian victims of emergencies including traffic accidents.

—Approval was given by the Executive Council to the appointment of a committee to work with the American Association of Physicians' Associates on the exploration of ways to instigate liaison between that organization and the State Medical Society.

—The Executive Council passed a motion to the effect that the matter of preservation of manuscripts and possible publication of materials having to do with the "History of Medicine in North Carolina" not published in the two-volume history, be considered by the Committee on Archives and History, as well as the Editorial Board of the *North*

Carolina Medical Journal for further recommendations to the Council.

—Dr. W. Howard Wilson, as Commissioner, presented several recommendations for the ad hoc Committee on Third Party Payors: (1) that the President of the State Society be requested to call a meeting each year of those Society Committee Chairmen whose committees deal with third party payors, (2) that approval be given for the ad hoc Committee on Third Party Payors to develop a brochure for Society members describing the mechanisms currently available to them for dealing with third parties, (3) that the Executive Director assign one member of the headquarters staff the primary responsibility as a resource person for assisting physicians in dealing with third party payors, and (4) after the brochure has been prepared that this committee has disposed of its obligation.

—Following a brief presentation by Miss Martha Daly, Sanford Central High School, the Executive Council endorsed the Sanford High School Future Physicians' Club and commended its members for their efforts in its formation and activities.

The Council discussed the problems related to insurance industry and government intermediaries' determination of professional fees in considerable detail, following which a motion was approved to refer the problem of determination of professional fees by a third party to the Executive Committee, who after consultation with counsel, will draw up a report to be transmitted to the House of Delegates. See separate REPORT L—REPORT OF THE EXECUTIVE COUNCIL, page 67, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council was informed by representatives of the North Carolina Department of Social Services that Federal Regulations pertaining to the Medicaid Program require an agreement, acknowledgement or certification by doctors and other providers of service in order to comply with program regulations. Following considerable discussion, the Executive Council approved a motion to transmit this information to the House of Delegates with its recommendation that, of the alternatives offered, the wording on claim forms was the preferred method of compliance. See separate REPORT M—REPORT OF THE EXECUTIVE COUNCIL, page 67, HOUSE OF DELEGATES, May 21, 1972.

—President-Elect Dr. John Glasson, reporting as information, recalled that the Lincoln County Medical Society last year requested the Medical Society to conduct a study of the number of medical students needing to be educated in the medical schools of our state and to try to determine the best way of meeting this need. He also reported that the Joint Conference Committee on Medical Care, which consists of a body of representatives of health care deliverers, had been requested by President Styron to undertake this study. The Joint Conference Committee has appointed a subcommittee with Dr. Glasson serving as chairman to study this problem and to bring a report back to the Medical Society. The Committee is not ready at this time to make a final report, Dr. Glasson stated.

—Dr. David G. Welton, as a representative of the North Carolina Delegation to the AMA, presented a resolution proposed for submission to the AMA, encouraging AMA use of every available communication technique to disseminate topical and accurate information to physicians and the

public. The Executive Council approved the Resolution. See separate REPORT N—REPORT OF THE EXECUTIVE COUNCIL, page 67, HOUSE OF DELEGATES, May 21, 1972.

—The Executive Council reconsidered the action of the House of Delegates in May 1971 directing that the Councilor Districts of the Medical Society be redrawn so that the members of the Society residing in any one District be more equitable, and that there be no increase in the number of Councilor Districts, and passed a motion that the attached plan marked Exhibit A be submitted to the House of Delegates to conform with the action of the House of Delegates, but that the Executive Council recommend its rejection. See separate REPORT O—REPORT OF THE EXECUTIVE COUNCIL, page 68, HOUSE OF DELEGATES, May 21, 1972.

Nominees for the MedPac Board of Directors were received and the following were elected:

Ernest Larkin, M.D.
 Joe Fleetwood, Jr., M.D.
 Charles Nicholson, M.D.
 John Merritt Cheek, Jr., M.D.
 Kenneth Paul Carlson, M.D.
 John Hall, M.D.
 Donald Brock Koonce, M.D.
 William Fredwin Hollister, M.D.
 Lloyd Harvey Robertson, Sr., M.D.
 Allen Ledyard DeCamp, M.D.
 Torben Seear, M.D.
 Robert Carr Moffatt, M.D.
 John Sloan Rhodes, M.D.

Frank Woodson Jones, M.D.
 Jack Hughes, M.D.
 Thomas Gardiner Thurston, M.D.
 Kenneth Edward Cosgrove, M.D.
 Louis deS. Shaffner, M.D.
 Edgar T. Beddingfield, Jr., M.D.
 John Tyler Dees, M.D.
 Charles Walter Tillet, Jr., M.D.

AUXILIARY

Kate B. DeCamp (Mrs. A. L.)
 Ruby Byrum (Mrs. C. C.)
 Peggy Crutchfield (Mrs. A. I.)

—Dr. John L. McCain, as Commissioner, presented a resolution on behalf of the Committee on Public Relations dealing with efforts to improve patient care and most effectively utilize physicians time through better methods of health information transfer, as well as to support a proposed project of the North Carolina Health Council undertaking the development of audio-visual capabilities. See separate REPORT P—REPORT OF THE EXECUTIVE COUNCIL, page 68, HOUSE OF DELEGATES, May 21, 1972.

—Dr. J. Henry Cutchin, Jr., observed that this was the last meeting of the Council over which President Styron would preside, whereupon the membership of the Council gave him a rising vote of thanks for his able leadership during the past year.

—President Styron called attention to the fact that this was the first meeting of the Executive Council in the chambers of the new headquarters building. There being no further business, the Council adjourned at 5:35 p.m.

Abridged Minutes of the Meetings of the House of Delegates

SUNDAY AFTERNOON SESSION

May 21, 1972

The First Meeting of the House of Delegates of the Medical Society of the State of North Carolina convened at two-twenty-six o'clock in the Cardinal Ballroom of The Carolina Hotel, Pinehurst, North Carolina, Dr. Charles W. Styron, President of the Society, presiding.

DR. CHARLES W. STYRON:

The Annual Meeting of the House of Delegates for 1972 will come to order.

It gives me great pleasure to present to you our Speaker, Dr. James E. Davis.

DR. JAMES E. DAVIS [Speaker of the House of Delegates of the Society]: Thank you, Mr. President.

The invocation will be given by the Reverend Eddie McPeters, Pastor of the Biscoe Baptist Church, Biscoe, N. C.

REVEREND EDDIE MCPETERS: Teach us, Our Heavenly Father, to know Thy will and Thy way as we convene this meeting; let it be so under the power of Thy Holy Spirit. Let us know that all we do we stand before Thee in answer for.

In Jesus name we pray,
Amen.

SPEAKER DAVIS: We welcome our visitors this afternoon, particularly those who are here for this Memorial Service to honor our departed members and to lead us into this Memorial Service, I now recognize Dr. Otis Duck.

MEMORIAL SERVICE

DR. W. OTIS DUCK [Chairman, Committee on Necrology]:

Mr. Speaker, Dr. Styron, Members of the House of Delegates, Families and Friends of any of our Deceased Colleagues:

Our speaker today happens to be a native of Mars Hill, North Carolina; a graduate of Mars Hill College and the Southeastern Theological Seminary at Wake Forest.

He has been a leader and very active in the spiritual affairs of our State for a number of years and more particularly in his capacity on the Board with the North Carolina Baptist State Convention.

He has been serving effectively as the Pastor of the First Baptist Church of Biscoe, North Carolina for the past five years.

It gives me great pleasure to introduce to you at this time Reverend Eddie McPeters of Biscoe.

REVEREND MCPETERS: Dr. Duck, Platform Members, Ladies and Gentlemen:

I can think of fewer things more tragic than for a person to be born into this world, to live and to die and to leave a lasting mark upon the society wherein he dwelled.

For one to be somewhat like the "begats" of the Bible—you remember those long chapters in the Old Testament that speak of "so-and-so begat so-and-so, and so-and-so begat so-and-so" and this is the only epitaph remaining in their behalf.

But we come today to pay tribute to a group of men and women who were born, who lived and who left an indelible mark upon this world and who have now passed from the scene of time into the vast space of God's eternity.

Some years ago, there came into my possession a writing that would be deemed from one of the lost books of the

Bible. The scholars of old did not include it in the canonization of the scriptures and yet it is a writing that to me has very definite and significant meaning.

In nineteen years of ministry I have used this writing only on one occasion, at the last rights of a man who walked as a prince among men. For this writing, though we would not call it scripture for it was not canonized, speaks of people who walk uprightly before God.

Will you listen with open hearts?

Let us now praise famous men and our fathers that begat us; the Lord has wrought great glory by them by his great power from the beginning. Such as did bear rule in their kingdom, men renowned for their power giving counsel by their understanding and declaring promises; leaders of the people by their counsel and by their knowledge and learning meet for the people; wise and eloquent in their instruction. Rich men furnished with ability living peaceably in their habitation.

All these were honored in their generation and were of glory of their time.

There be of them who left a name behind them that their praise might be reported, but these were merciful men whose righteousness hath not been forgotten. With their seeds shall continually remain a good inheritance and their children within the covenant. Their bodies are buried in peace, but their names liveth for ever more.

The people will tell of their wisdom and the congregation will show forth their praise.

So read the Apocryphal Book of Ecclesiasticus 44.

I had the privilege of standing some years ago in Korea along with a group of men and we stood at attention. The officer before us pinned on each of our chests a blue ribbon that was encircled with gold and then he stepped back and read a citation, saying in part:

This commendation is being given for service above and beyond the call of duty.

As I read the 76 names which are listed on the second page of the Memorial Service program, names of the gallant men and women who went "above and beyond the call of duty" in their outreach to mankind, I know full well that some of these names represent personal colleagues for each of you.

Perhaps a roommate in college; a brother in internship; perhaps a partner in an operating room; perhaps a valuable consultant and in those days when you needed the wisdom of another; but, whether you knew any of these persons individually and personally or not, is beside the point because the real fact remains that you, along with these 76, all belong to that high fraternal order of the high art of healing.

It is not difficult for me to see these 76 in the eye of my imagination standing, not before some earthly officer, but standing before the Commanding General of the Universe, standing there not to have pinned upon their chests a blue ribbon encircled in gold that will pass away with the dust of time, but standing there to hear Him say unto them, "Well done, thou good and faithful servant."

These have passed from this life into the next, but their influence will not pass away, not so long as men and women like you dare to delve into the deepest recesses of research

in search for implements of healing. These people will not be gone not so long as you dare to determine to continue to learn and not so long as you dare to care deeply in your own heart about the well-being of suffering humanity in your community and in your world.

I would not ask you to mourn these who have passed from our presence for they were indeed, as I read a moment ago, "Rich men furnished with ability" and they have gone to receive the reward the Commanding General of the Universe has for them, but I would ask you to open your hearts and to listen to the words of Alfred Tennyson for I believe these are the words that these 76 would speak to us were they in a position to do so today, for Tennyson wrote under the caption, "Crossing the Bar,"

Sunset and Evening Star,
At one clear call from me,
And may there be no mourning at the bar,
When I put out to sea;
For such a tide as moving seems asleep,
To full for sound or foam,
When that which drew from out of boundless deep
Treads again back home,
Twilight and evening bell
And, after that the dark,
And, may there be no sad farewell
When I embark
For though from outworn our time and place
The flood may bear me far
I hope to see my Pilot face to face,
When I have crossed the bar.

Let us pray:

Our Father, for these that Thou hast given unto this world, for all that they have done, for what their influence will continue to do, we praise Thy name.

For the resurrection and the hope that is ours through Jesus Christ, we praise Thy name and we would come together in body just now to pray.

[Whereupon the entire assemblage then joined Reverend McPeters in reciting "The Lord's Prayer."]

SPEAKER DAVIS: Thank you, Mr. McPeters and Dr. Duck, for a truly inspiring and meaningful Memorial Service.

HOUSE OF DELEGATES

It is now my privilege to present to you your very able, knowledgeable and articulate Vice Speaker, Dr. Chalmers Carr!

Dr. Carr, will you stand up, please?

Our First Vice President, Dr. Kenneth Cosgrove!

Our Second Vice President, Dr. William Romm!

Our Constitutional Secretary, Dr. Harvey Estes!

[Whereupon each officer stood to be recognized as he was introduced.]

And, this year, for the first time, we have official delegates from the student organization at our three medical schools. We have had representatives from these schools before. This is the first year we have had bonafied voting delegates and those that are present I will ask them to stand up and be recognized.

I understand Mr. Leon Woodruff from Bowman-Gray School of Medicine is here, as is Mr. Martin Schwartz from Duke University School of Medicine.

[Mr. Leon Woodruff and Mr. Martin Schwartz stood to be recognized.]

And, Mr. Cecil Farrington from the University of North Carolina is expected.

I have the feeling that none of us, regardless of how

intimately associated with this Society we may be, that none of us fully appreciates the vast amount of work that goes into keeping this organization operating efficiently, nor do we fully apprehend the labor, the sweat and the tears that go into preparation for just this annual meeting.

This massive job, of course, is done by your headquarters staff and at this time I would ask Mr. William Hilliard, our Executive Director, to please stand.

Mrs. LaRue King who now has a new title of Assistant to Executive Director, would you please stand.

[Mr. Hilliard and Mrs. King stood to be recognized.]

Through you, we hope you will express to your entire staff our appreciation for the limitless work that you do.

A new field representative, has been added to the staff Mr. Stephen Morrisette, and if he is present I would ask him to rise and be recognized.

[Mr. Morrisette stood to be recognized.]

Now, Dr. Wilkerson, may we please have a report from the Credentials Committee on registration?

DR. CHARLES B. WILKERSON, JR. [Chairman, Credentials Committee]: Mr. Speaker, you have a quorum present and ready for business.

SPEAKER DAVIS: Thank you, a quorum being present and ready for business, we will then proceed.

I feel it very appropriate that our first order of business every year is to receive the Presidential Address.

PRESIDENT'S MESSAGE

Our President this year is a man who knows this Society, its membership, capabilities and its problems first-hand. In his case, a bylaw admonition to the President-elect generally prepare yourself to assume the duties of President is both humorous and unnecessary. After nine years as our Secretary, and after 365 days as President-in-waiting Dr. Styron was prepared for his job and his preparation has served us all well.

He has led us with the minimum of tribulations. He has represented us with dignity and he has spoken for us with clarity through a year of success and accomplishment.

It is my pleasure to present to you our President, Dr. Charles W. Styron!

[Whereupon the assemblage accorded President Styron a standing ovation.]

(President Styron then delivered his Presidential message which appears in the July, 1972 *North Carolina Medical Journal*, Vol. 33, No. 7.)

SPEAKER DAVIS: Thank you, President Styron.

And, may the record show that the President received a standing ovation upon the completion of his address. Many organizational records show that the President receives such an ovation prior to his address and I am anxious that our organization shows that Dr. Styron was thus received both fore and aft! [Laughter]

One of the nicest and certainly most anticipated portions of our traditional opening session of our annual meeting is to hear from the President of our Women's Auxiliary and I will again call upon our President to escort the President of the Auxiliary to the podium and we would like to hear from Mrs. Ruby Byrum at this time!

[Whereupon President Styron then escorted Mrs. Byrum to the podium, during which time she was accorded a standing ovation.]

MESSAGE OF THE PRESIDENT OF THE AUXILIARY

MRS. CLIFFORD C. (Ruby) BYRUM [President, Auxiliary to the Medical Society]: Mr. Speaker, Dr. Styron, I

Glasson, Executive Council and Delegates of the Medical Society of the State of North Carolina:

It has been an honor and a privilege to serve this year as President of the Auxiliary. I am deeply grateful for your support, both financial and personal. It has been a good year and mainly so because of the wonderful cooperation and working together of the Medical Society and Auxiliary.

The detailed report of the Auxiliary activities is included in your annual report and I hope you will find the time to read it. Our theme for this year was "The Name of the Game is Commitment!"

The game is football and the teams are commitment versus complacency. The banners are our special projects: AMA-ERF, Legislation, Membership, Health Manpower, International Health and Community Health.

We have 2,694 members organized in 49 auxiliaries representing 67 of our hundred counties in North Carolina. We have 25 active Legislative Chairmen who have reported outstanding programs.

We have made real progress in two ways.

Our Auxiliary has proposed central billing, not only for State and National dues, but for Med-Pac membership as well.

The second step was the completion of our New Medical Society headquarters facility where the Auxiliary has an office in this elegant building and access to the business machines and a part-time secretary.

The State Student Loan Fund, which was established in 1930, had the most crucial year since its establishment. After making 16 loans last year, we had a balance of 49 cents! [Laughter] This was a challenge!

Donations and repayment of loans has now placed us in business again. We have made three loans this year and three more are being processed. Our balance in this account is \$5,000.

To our only benevolent endeavor of the National Auxiliary, AMA-ERF our State Auxiliary has contributed almost \$2,000 this year. Many means were used to raise this money, but the greatest part came through the sale of Christmas cards, both original and commercial and memorial gifts.

Just as the community looks to the physicians as leaders, the wives are often placed in the same role. Auxiliary members serve in many capacities in community service.

Freedom to all is important, no less so for doctors. You can help us by urging your wife to be more active in the Auxiliary, to do her part for the free enterprise of medicine and good health care for all people without government control.

Thank you very much for granting me the privilege of appearing before you today. As always, the Auxiliary tries to be a supporting arm to the Medical Society.

[Whereupon the entire assemblage then accorded President Byrum a standing ovation.]

SPEAKER DAVIS: Mrs. Byrum we certainly thank you, not only for bringing us this message, but also for the fine, tireless work that your Auxiliary does with our support and we hope you will express our thanks to every member of your organization.

ANNUAL REPORTS

VICE SPEAKER CARR: Members of the House, the next item on our agenda pertains to the business of the House, which is the reception of the annual reports.

If you will refer to your Compilation of Annual Reports, there are many brief and many longer reports, and as custom has it these will not be read or reiterated. An opportunity

will be given in a few moments to any committee chairmen who wishes to amplify the report and supplement it in a brief fashion, if he will go to one of the microphones and do so after the reception of some special reports.

If you have some remarks, we ask that you be in preparation to present them and have them ready.

First, from the Constitutional Secretary!

DR. E. HARVEY ESTES, JR.: No further report.

VICE SPEAKER CARR: From our Executive Director, Mr. Hilliard!

MR. HILLIARD: No further report.

VICE SPEAKER CARR: From the Councilors, not listing them by Districts! Does any Councilor wish to make a supplementary, additional report or have the floor at this time?

[No response]

Does any Commissioner wish to make a supplementary report or bring anything before the House?

[No response]

A report from the AMA Delegation is in order, Dr. Koonce!

DR. DONALD B. KOONCE [AMA Delegate]: Mr. Speaker and Fellow Delegates:

The AMA House of Delegates has met twice since the last meeting of this House of Delegates, in Atlantic City in June and in New Orleans the latter part of November.

Both of those meetings were well attended by the North Carolina delegation. When I speak of the North Carolina delegation, I don't speak of just the four of us who happen to sit on the floor of the House of Delegates; I speak also of the Alternate Delegates and the Officers because without them we would have great difficulty in making many, many decisions that we do make.

We have a daily breakfast caucus of the North Carolina delegation, while we are there, just to discuss those problems.

Your four delegates have attended the Executive Council meetings of the Society, particularly since they were kind enough to give us a seat at their Round Table.

John Kernodle was re-elected without opposition as a member of the Board of Trustees of the AMA in Atlantic City.

There are many representatives of your Society working on committees, commissions and councils of the AMA. I can assure you when the House of Delegates of the American Medical Association meets, they know North Carolina is there!

Now, I'm sorry I can't give you a factual report on what business we are anticipating in San Francisco because we don't have the first package of resolutions, but we know from the past there will be well over a hundred resolutions and items of business, reports, etc., to come before the House and go before Reference Committees.

The things that we anticipate are similar to the things you have here, except a great deal more—peer review problems with the insurance industry; medical manpower; pending and anticipated federal legislation; some change in the format of meetings of the AMA and a particular effort to increase participation of younger members of our medical profession in the activities of the AMA and the medical students and the house officers and we will give you a report after our meeting in San Francisco. Thank you. [Applause]

VICE SPEAKER CARR: Thank you, Dr. Koonce.

I'm sure the House of Delegates appreciates the work

done by your delegates to the AMA. They work hard and long.

Mr. President, if I may step out of the role a moment, I would like to ask the House to recognize Dr. Kernodle by a round of applause. He has done a yeoman's service and has become quite a nationally known figure now, representing us in Washington on the Board of Trustees and I would like to personally thank John.

[Whereupon Dr. John R. Kernodle, Vice-Chairman, AMA Board of Trustees stood to be recognized.] [Applause]

That item of annual reports have been concluded except for my announced intention for asking for any amplifying or supplementary reports or matters of information from any of the voluminous committees that work so hard and who are seldom seen in person.

Are there any?

I hear none, so, I would now entertain a motion to accept all the reports as published.

Do I hear such a motion?

[The motion was duly made and seconded from the floor.]

It has been moved and seconded.

Do I hear any discussion? [No response]

All those in favor, please signify by saying "aye"; opposed "no."

The "ayes" have it and it's carried.

SPEAKER DAVIS: Gentlemen, the House is now ready to receive nominations and proceed with elections of officers and other representatives.

NOMINATION AND ELECTION OF OFFICERS

May I remind you that seconds to nominations are not required and ask your indulgence in refraining from offering them.

I would like to appoint Tellers in case we need them for this and Tuesday afternoon session.

I would ask Dr. Roy Bigham to please serve as Chief Teller and ask to serve with him, Dr. Robert Lincoln, Dr. Charles Nicholson, Dr. Albert Stewart and Dr. D. E. Ward.

Printed ballots or ballots for written voting are available if necessary. As you recall, our bylaws allow a voice vote unless there are multiple nominations.

You are also familiar with the bylaw requirement that the Chairman of the Nominating Committee submit to the President of the Society at least two weeks in advance the sealed envelope containing nominations for officers and I now call upon President Styron to step up here, open the sealed envelope and place the names in nomination.

PRESIDENT STYRON: Mr. Speaker, I have had this envelope in my possession for over two weeks. So, here it is!

Report of the Nominating Committee of the Medical Society of the State of North Carolina 1972:

President: John Glasson, M.D.,

President-elect: George G. Gilbert, M.D.,

First Vice President: Frank R. Reynolds, M.D.,

Second Vice President: Harry Holler Summerlin, Sr., M.D.,

Speaker of the House of Delegates: James E. Davis, M.D.,

Vice Speaker of the House of Delegates: Chalmers Carr, M.D.,

Councilor for the Fifth District: Albert Stewart, Jr., M.D.,

Vice Councilor for the Fifth District: August M. Oelrich, M.D.,

Councilor for the Seventh District: Jesse Caldwell, Jr., M.D.,

Vice Councilor for the Seventh District: William Thomas Raby, M.D.,

Councilor for the Tenth District: Kenneth E. Cosgrove, M.D.,

Vice Councilor for the Tenth District: Otis Bentley Michael, M.D.,

Councilor for the Third District: E. Thomas Marshburn, M.D.,

Vice Councilor for the Third District: John Olin Perritt, Jr., M.D.,

Mr. Speaker, it is my duty and pleasure to place these nominations before you as read.

SPEAKER DAVIS: Thank you, President Styron.

The floor is open now for nominations for all of these offices. The President-elect, Dr. Glasson, has already been elected so we will not offer that position. (The Speaker then called for nominations for each office listed in the report, there being no response for additional nominations.)

DR. KOONCE: Mr. Speaker, I move nominations be closed and the slate as submitted be unanimously elected.

SPEAKER DAVIS: Is there a second?

[The motion was duly seconded from the floor.]

The motion has been made that the nominations be closed and the slate as submitted be elected.

All those favoring this motion please say "aye"; opposed "no."

This slate is elected.

[Applause]

The bylaws also require of the Nominating Committee that they submit to all delegates at least thirty days in advance of the annual meeting nominations for multiple offices which have to be filled by you and I now recognize Dr. Dameron to place these names officially in nomination.

DR. THOMAS B. DAMERON, JR., [Chairman, Nominating Committee]: Thank you, Dr. Davis.

The Nominating Committee would like to submit the following nominations for your consideration:

For American Medical Association Delegates beginning January 1, 1973 to December 31, 1974, two years:

Donald B. Koonce, M.D.

Frank W. Jones, M.D.

As Alternate AMA Delegates for the same period of time

James E. Davis, M.D.

Louis deS. Shaffner, M.D.

There were no vacancies for the State Board of Health or Medical Care Commission.

For the Editorial Board of NORTH CAROLINA MEDICAL JOURNAL, for four year terms, we nominate:

John S. Rhodes, M.D.

Rose Pully, M.D.

Louis deS. Shaffner, M.D.

For the Board of Trustees, North Carolina Blue Cross Blue Shield, Inc.:

Alfred T. Hamilton, M.D.

Fred A. Blount, M.D.

For members of the Retirement Savings Plan Committee of the Medical Society of the State of North Carolina (three years):

Jesse Caldwell, M.D.

William F. Hollister, M.D.

Leonard Palumbo, M.D.

For the North Carolina Board of Medical Examiners

E. Wilson Staub, M.D.

Charles B. Wilkerson, Jr., M.D.

For the Committee on Blue Shield for three year terms:

Surgery.....W. Benson McCutcheon, Jr., M.D.
Radiology.....John Olin Perritt, M.D.
Internal Medicine.....Benjamin Vatz, M.D.
General Practice.....Leon W. Robertson, M.D.
OB-GYN.....Philip Henderson Pearce, M.D.
Ophthalmology.....Luther C. Sappenfield, Jr., M.D.
Psychiatry.....Philip Groesbeck Nelson, M.D.
Anesthesiology.....Lawrence Bowman, Haynes, M.D.

SPEAKER DAVIS: You have heard these nominations which have been submitted for at least thirty days.

(The Speaker called for nominations from the floor for each of the positions listed by the Committee on Nominations without response from the floor.)

DR. AMOS JOHNSON [AMA Delegate]: I move that nominations be closed and the slate elected.

SPEAKER DAVIS: Dr. Johnson has moved that nominations be closed and the slate as submitted be elected.

Is there a second?

[The motion was duly seconded from the floor.]

Those favoring this motion please say "aye"; Opposed "no."

The slate as submitted is elected.

I would like to recognize Dr. George Gilbert, your President-elect, who is on my right and your left, to ask him to please stand and be recognized at this time.

[Whereupon Dr. George G. Gilbert then stood up to be recognized.] [Applause]

At this point, we would like to deviate a little bit from the printed agenda and bring up one matter of Unfinished Business.

CONSTITUTION AND BYLAWS

This has to do with a change in the Constitution which you accepted last time and which will now be offered to you for a second reading and possible ratification.

To present this matter, I will now recognize Dr. Henry J. Carr, Chairman of the Committee on Constitution and Bylaws.

To expedite the matter, what he is going to report to you is written in Report "E," the yellow paper report "E" which supplements the white paper report "E."

DR. HENRY J. CARR, [Chairman, Committee on Constitution and Bylaws]: Mr. Speaker, President Styron, Members of the House of Delegates:

The following items were presented to and accepted by the House of Delegates at the Annual Convention in 1971 and are now presented to the House of Delegates for final action. These items have been recommended by the Executive Council and also the Committee on Constitution and Bylaws.

The first item is the grammatical revision of the Constitution and Bylaws.

The second item is the name change of Society to North Carolina Medical Society.

SPEAKER DAVIS: If there is no objection, we will take both of these matters together as a single vote.

Is there objection?

[No response]

Dr. Carr assures me that every delegate last year got a complete copy of the grammatical revision. Copies were not adequate to circularize this year.

He also assures me that we have met the bylaw requirement that by the second reading that this has been officially sent to each component county medical society at least two months before the session.

So the question of the ratification of these two constitutional changes is before you.

May I have a motion that they be ratified?

[The motion was made from the floor.]

Is there a second?

[The motion was seconded from the floor.]

I would remind you that this requires a two-thirds vote of the delegates registered.

Is there any discussion about this matter?

[No response]

If not, those favoring ratification of both of these constitutional changes, please signify by saying "aye"; opposed "no."

The motion carries and these two changes are ratified.

Thank you, Dr. Carr.

(See REPORT E, page 63, for additional proposed changes in the Constitution and Bylaws.)

REPORT OF THE SPEAKER

Gentlemen, under my report, I would like to begin by congratulating this House on its most commendable and efficient mode of operation, not only today but also in previous sessions.

Your Vice Speaker and I are very proud to be your officers and we are deeply grateful to you for your cooperative help.

As we continue to work together to streamline our agendas to avoid redundancy and to achieve greater efficiency, we are anxious that this not be done in any respect at the expense of open and frank debate, or at the expense of any single member of this group feeling that he has not had adequate opportunity to express himself.

We are certainly not interested in sacrificing free speech for efficiency.

However, with our system of Reference Committees, which I think this House now fully understands, most of the discussion, debate and in-fighting, if you will, should occur at these sessions.

However, we want to remind you, although we hope it's not necessary, that is your House, that this is as is so often said the ultimate governing body of this Society and we want you to feel that you always not only have the privilege, but the obligation to say here what you think ought to be said.

Our purpose is to work with you to see that we do the very best job we can.

Now this year, on my right, has been provided special seating for alternate delegates. I think the empty seats signify the reason we feel this is necessary.

We hope that this is a first step towards achieving better attendance by alternate delegates. We would hope that alternate delegates be elected by the component county societies not simply to be available to replace an indisposed delegate, but be elected to attend this annual session, to become familiar with the work of the House of Delegates and to become familiar with the problems of this Society and as one who would ultimately be elevated to the position of delegate.

I know that some of our county societies already have limited tenure; that is, substantive but limited tenure of his delegates with a mechanism for elevating alternate delegate to delegate.

We think this is an excellent mechanism. We hope that all county societies would consider adopting the same plan and we ask for your help in getting alternate delegates attend these annual sessions.

I would call attention to the fact that last year a summary of the actions of the House of Delegates was published as soon as possible after our annual meeting in the North Carolina Medical Journal which came out in July and this will be done again this year, with the hope that this might satisfy the need of some of you, or the need of some component societies to have a ready reference as to the actions taken by the House of Delegates particularly on matters which they may have originated or in which they have special interest.

Now, following the custom of the past two years, I would like at this time as briefly as possible summarize for you the actions taken by the House of Delegates last year and hope it will be a brief and very short summary of the actions which have taken place in the intervening year.

These items are not necessarily offered in order of importance.

However, among the actions taken last year was to accept the resolution that the geographical boundaries of the Councilor Districts of the Society be redrawn so that the number of members residing in any one district be more equitable and that there be no increase in the number of Councilor Districts.

The Executive Council was charged with bringing back a recommendation to this year's House of Delegates. It does so. It will appear before you shortly as Report "O."

You also authorized the appointment of an ad hoc committee on third party payors. This committee has been appointed, is functioning and a report is contained in the Compilation of Annual Reports.

Last year, you voted to change the name of the Society. It was approved then and you have just made the official name of this Society, North Carolina Medical Society! That's what you just authorized!

You also authorized a budget last year. I'm happy to report that the Society has operated within budget requirements and an auditors' report of last year's operations is also contained in your Compilation.

Last year, you also requested the formation of a voluntary liaison group to include representatives of major health professional organizations and representatives of health professional licensing boards.

This matter was referred to the Board of Medical Examiners and exploratory discussions have been conducted by the Secretary of the Board of Medical Examiners with the secretaries of other professional licensing boards.

You approved recommendations of the Committee on Personnel and Headquarters Operation in regard to various mechanisms of operating the headquarters building and staff. These recommendations have been complied with, both in day-to-day operations of the Society and in consultation with the Committee on Personnel and Headquarters Operation.

You approved honorary membership for Drs. Cole, Chapman and Wynne. These memberships have been effected and these men have been notified.

You recommended that the Council on Review and Development evaluate committees and empowered the President of the Society to replace committee members found not to be functioning effectively. This matter has been referred to the committee on Constitution and Bylaws for incorporation in the bylaws.

You approved the establishment of a committee on peer review as a standing committee. This committee has been appointed, has functioned during the year 1971-72. A report is contained in your Compilation and this matter has also

been referred to the Committee on Constitution and Bylaws to establish this committee as a standing committee.

You authorized the printing of the "History of Medicine in North Carolina." I'm told that this is now in the process of being printed. Expected publication date is October of this year. No lesser authority than Dr. Roscoe McMillan has informed me that there are a few order blanks left, that there are as many as necessary and he would be delighted to hear from you concerning your order for this two-volume set.

Last year, you endorsed and supported the nomination of Dr. John R. Kernodle to succeed himself as a member of the Board of Trustees of the AMA. As you already heard from Dr. Koonce, this re-election was accomplished and Dr. Kernodle serves also as you know as Vice Chairman of this Board of Trustees.

You endorsed the goal of one common insurance claim form last year and this matter of a uniform claim form is still under consideration by the North Carolina Commissioner of Insurance. Our recommendations have been forwarded to him. It is sincerely expected that a decision is to be made on this within the near future.

You recommended that unused beds in state owned hospitals be utilized to perform needed health functions by a method that would stress manpower training as well as provision of services and that these services be done in cooperation with existing health services and facilities. The position of this Society was conveyed by the Committee on Legislation to appropriate committee hearings in the 1971 General Assembly.

You also approved five major recommendations of the Committee on Social Service Programs. These have been forwarded to the Commissioner of the Department of Social Services.

You approved suggestions to the Department of Social Services for guidelines in determination of disability of applicants to the Department of Social Services. This also has been referred to the Commissioner.

You approved the policy regarding concurrent daily care by two physicians making daily charge but taking care of the same patient at the same time and defined the relationship of primary and consulting physicians. This policy, believe, has been widely publicized to the membership in the Public Relations Bulletin and has been filed as State Society policy.

You recommended the appointment of a standing committee advisory to the Crippled Children's Program of the State Board of Health to advise the Board on matters relating to the participation and performance of physicians in this program. This committee has been appointed, is functioning and a report is included in your Compilation. This matter has also been referred to the Committee on Constitution and Bylaws for appropriate revisions.

You adopted a resolution to the AMA in support of Regional Medical Programs, urging appropriate federal agencies restore budget reductions of Regional Medical Programs. This resolution was referred directly to the American Medical Association and also to every member of the North Carolina Delegation to the AMA.

You recommended that county medical societies assist authorities in developing a plan for medical care of prisoners in local confinement facilities. This has been referred to the Commissioner of the North Carolina Department of Social Services.

You endorsed the AMA Medcredit proposal for the

taken last year or the manner in which your actions were carried out in the intervening year?

[No response]

We move on now to reports from Executive Council and, again, our Constitution and By-Laws is quite explicit in stating that all actions of the Executive Council should be subject to review by the House of Delegates.

So for your knowledge and review, I now recognize Dr. Styron to introduce these reports.

REPORTS OF THE EXECUTIVE COUNCIL

PRESIDENT STYRON: Mr. Speaker, you have received in your delegates packets for your information and approval, summaries of the actions of the Executive Council at its meeting on September 26th, 1971, and January 30, 1972. You also have Reports "A" through "J" which originated from activities of the Executive Council in these two meetings and which I will now present to you by subject only.

REPORT A

Subject: The Annual Budget Estimates for 1972
Referred to: Reference Committee No. 1

On motion made and seconded, the budget estimates for 1972 were adopted by the Council.

At its January 30, 1972 meeting, the Executive Council approved a revision in budget estimates for 1972 to indicate the increased expected rental income and to provide for the employment of a second field representative.

The Budget Estimates for 1972 are as follows:

January 1, 1972 to December 31, 1972

Estimated balance January 1, 1972.....	NIL	NIL
Annual Dues 3,600 paying members / 3,400 @ \$145.....	\$497,500	\$512,000
/ 200 @ \$ 95		
Sales—Rosters, Journals & RVS.....	3,500	3,500
Author contributions to Cuts or negatives	125	125
Revenue Unexpected	500	1,000
Technical Exhibits	14,500	10,000
Journal Net Advertisements—Local	11,000	10,000
Journal Net Advertisement—National	32,000	32,000
**AMA Remittance 1% of dues processed.....	3,000	3,400
MEDPAC Remittance 1% of dues processed.....	250	220
Rental Income (New Headquarters Facility).....	9,175	49,182
	\$571,550	\$621,427

Schedule A	186,348	192,968
Schedule B	78,154	75,888
Schedule C	32,775	33,150
Schedule D	10,764	29,075
Schedule E	8,200	7,900
Schedule F	21,900	22,225

* Any revenue derived from collection efforts related to American Medical Association dues and processing of same shall accrue to this item of the Budget.

	1971	1972
Schedule G	34,009	43,98
Schedule M	199,400	216,24
EXCESS OF RECEIPTS OVER EXPENDITURES.....	\$571,550	\$621.42
EXCESS OF EXPENDITURES OVER RECEIPTS.....	—0—	—0—
RESERVES: (Costs, \$26,104.55—Land).....	—0—	—0—
SUBMITTED TO COMMITTEE ON FINANCE.....		September 11, 197
SUBMITTED TO EXECUTIVE COUNCIL FOR APPROVAL.....		January 30, 197
SUBMITTED TO HOUSE OF DELEGATES FOR APPROVAL.....		May 21, 197
**To be appropriated to Secretarial Budget A-6		
REVISED 1972 BUDGET ESTIMATED AS APPROVED BY THE EXECUTIVE		
COUNCIL AT ITS MID-WINTER MEETING JANUARY 30, 1972		

EXECUTIVE BUDGET

A- 1 President, expense of (travel & Communications)*	\$ 6,000	\$ 6,00
A- 2 President's secretarial assistance	5,000	5,00
A- 3 Secretary, travel of *	1,000	1,00
A- 4 Executive Director-Treasurer, salary of	20,000	21,50
A- 5 Executive Director-Treasurer, travel of *	6,000	6,00
A- 6 Executive Office, Secretarial & Clerical Assts.**	36,000	45,00
A- 7 Executive Office, equipment-replacements (combining A-7 & E-5)	2,000	2,00
A- 8 Executive Office, expense of (communications, printing, and supplies, repairs & replacements of expendables (Combining A-8 & E-6)	22,500	18,00
A- 9 Bonding (in effect to 1972)	—0—	91
A-10 Audit (Quarterly & Annual)	1,700	1,80
A-11 Taxes (Salary tax)	4,503	4,92
A-12 Insurance: fire, liability & Compensation	2,150	2,12
A-13 Membership Record, acctg., IBM Machine Rental, Forms	8,600	8,60
A-14 Publications, reports & executive aids (combining A-14 & E-8)	300	30
A-15 Insurable: interest insurance & retirement plan	5,295	—0—
A-16 Executive Vice President, Retirement Income	9,000	—0—
A-17 Office Manager, salary of	11,000	11,90
A-20 Administrative Assistant, salary of	9,800	10,50
A-21 Administrative Assistant, travel of *	2,000	2,00
A-22 Controller, salary of.....	13,500	14,40
A-23 Field Representative No. 1, salary of	15,000	16,00
A-24 Field Representative No. 2, salary of	—0—	10,00
A-25 Field Representative, travel of (1 & 2) *	5,000	5,00
	\$186,348	\$192,9
B. JOURNAL BUDGET		
B- 1 Journal, printing and mailing.....	\$ 45,000	\$ 54,8
B- 2 Journal, cuts for.....	500	3
B- 3 Editor, salary of.....	2,500	2,5
B- 4 Assistant Editor, salary of.....	6,400	6,8
B- 5 Editorial Office, expense of (12 Months rent, communications, printing and supplies, repairs and replacements).....	850	81
B- 6 Journal Business Manager's Office Expense of (12 Months communications, printing and supplies, repairs and replacements).....	700	1,0
B- 7 Business Manager's Office equipment for.....	100	1
B- 8 Journal, travel for (local and national).....	200	2
B- 9 Taxes (salary tax).....	834	93
B-10 Sales tax on Journal subscriptions and Roster sales.....	1,400	1,8
B-11 Roster, publication	7,000	—0—
*B-12 Executive Council Reports, Transactions, Annual Reports, printing of.....	7,000	—0—
B-13 Advertising Secretary, salary of.....	5,670	6,5
	\$ 78,154	\$ 75,8
* Transferred to item C-2		

** Any revenue derived from collection efforts related to American Medical Association dues and processing of same shall accrue to this item of the Budget.

* Basis: Real for personal maintenance and travel @ 10¢ per mile and/or common carrier rate and for official purposes.

INTRA-FUNCTIONAL ACTIVITY BUDGET

	1971	1972
C- 1 Executive Council expense of and travel of Councilors including district travel.....	\$ 4,000	\$ 4,000
C -2 Publication of Executive Council Minutes, Transactions, Annual Reports.....	1,000	6,500
C- 3 Legislative Committee, expense of (Local and National activity).....	5,000	2,500
C- 4 Maternal Health Committee, expense of (secretarial, communications, printing and supplies).....	4,000	3,600
C- 5 Committee on Drug Abuse.....	2,250	500
C- 6 Committee on Arrangements.....	100	C-11
C- 7 Scientific Exhibit Committee and Audio-Visual Program, expense of (including \$200 for Scientific Exhibit Awards and \$200 for Student Scientific Exhibit Award).....	975	900
C 8 Committee on Mental Health.....	400	400
C- 9 Committee on Mediation.....	200	400
C-10 Committee on Chronic Illness, TB & Heart Disease.....	1,500	400
C-11 Committees in general, expense of (including committees under \$100 allocations)....	3,000	4,500
C-12 Committee on Nominations.....	100	100
C-13 Committee on Occupational & Environmental Health.....	100	100
C-14 Committee on Professional Insurance.....	C-11	C-11
C-15 Committee on Relative Value Studies.....	550	550
C-16 Committee on Negotiations.....	C-11	C-11
C-17 Committee on Student AMA (Section & Transportation & Delegates to SAMA one each Medical School Chapter (3)).....	1,700	1,700
C-18 Committee on Disaster Emergency Medical Care.....	300	C-11
C-19 Committee on Industrial Commission.....	100	C-11
C-20 Committee on Constitution and Bylaws.....	300	300
C-21 Committee on Medical Legal.....	C-11	C-11
C-22 Committee Advisory to N. C. Department of Motor Vehicles.....	200	C-11
C-23 Committee on Cancer.....	C-11	C-11
C-24 Committee on Anesthesia Study.....	200	400
C-25 Committee on Child Health & Infectious Disease.....	C-11	C-11
C-26 Committee on Blue Shield.....	100	C-11
C-27 Committee on Hospital & Professional Relations.....	C-11	C-11
C-28 Committee on Social Services Program.....	100	C-11
C-29 Committee on Necrology.....	C-11	C-11
C-30 Insurance Industry Committee.....	300	600
C-31 Committee on Community Medical Care, sponsorship of 4-H Health activity for one trip to National 4-H Club for State Health Winner, and Today's Health subscription to 4-H Health Winners; Dues Rural Health Safety Council; Rural Health Conference	700	500
C-32 Committee on Retirement Savings Plan.....	C-11	C-11
C-34 Committee on Scientific Works.....	C-11	C-11
C-35 Committee on Headquarters Facilities.....	200	—0—
C-36 Committee on Family and Marriage Counselling & Family Life Education.....	100	100
C-37 Committee on Medicine and Religion.....	150	250
C-38 Committee on AMA-ERF.....	100	C-11
C-39 Committee on Credentials.....	C-11	C-11
C-40 Committee on Scientific Awards.....	100	C-11
C-41 Committee on Physical and Vocational Rehabilitation.....	100	C-11
C-42 Committee on Eye Care & Eye Bank.....	100	C-11
C-43 Committee on CHAMPUS.....	—0—	C-11
C-44 Blue Ribbon Committee No. 1 (Dissolved).....	100	—0—
C-45 Council on Review & Development.....	100	C-11
C-46 Committee on Finance.....	100	C-11
C-47 Utilization Committee	C-11	C-11
C-48 Committee on Medicare.....	200	200
C-49 Committee on Medical Education.....	2,000	1,000
C-50 Committee on Comprehensive Health Service Planning.....	250	250
C-51 Committee on Medical Aspects of Sports.....	500	1,600
C-52 Committee on Association of Professions.....	100	C-11
C-53 Committee on Physicians on Nursing.....	200	200
C-54 Committee Liaison to North Carolina Pharmaceutical Association.....	C-11	C-11
C-55 Committee on Personnel & Headquarters Operations.....	100	C-11
C-56 President's Communication Program.....	1,000	400
C-57 Advisory Committee on the Crippled Children's Program.....	100	C-11
C-58 Committee on Peer Review.....	—0—	200
C-59 Committee on Health Care Delivery.....	—0—	1,000
	\$ 32,775	\$ 33,150

D. EXTRA FUNCTIONAL ACTIVITY BUDGET

	1971	1972
D- 1 Delegates to AMA, expense of (8 including alternates to each Annual and Clinical Session)	\$ 5,964	\$ 8,875
D- 2 Conference Dues	200	200
D- 3 Woman's Auxiliary (contribution to entertainment, travel to National Auxiliary for 2 and productions).....	4,000	4,000
D- 4 Medical History Allocation, printing, Promotion and mailing of Medical Society History	600	16,000
	<u>\$ 10,764</u>	<u>\$ 29,075</u>

E. PUBLIC RELATIONS BUDGET

E- 3 Committee Chairman, out of State travel.....	\$ 500	\$ 500
E- 5 Public Relations, Equipment for.....	A-7*	—0—
E- 6 Public Relations Office, expense of (communications, and printing, and supplies, repairs and replacements).....	A-8*	—0—
E- 8 Publications and Executive Aids.....	A-14*	—0—
E- 9 Audio-Visual depiction, photography, radio-motion pictures, production, distribution and printing, purchase of films, etc.....	300	—0—
E-10 Educational distribution; reprints, periodicals press materials, pamphlets, and dodgers for educational purposes; production, distribution and printing, binding, stuffing and mailing.....	500	500
E-11 News and press releases, production and printing of.....	200	200
E-12 Public Relations Bulletin, production and printing of.....	3,500	3,500
E-13 State High School Science Fair Program, expense of.....	350	350
E-14 Exhibits and Displays: Purchase, rental, production, fabrication and transportation of	300	300
E-15 Conference for Medical Leadership.....	1,000	1,000
E-17 Today's Health Magazine Subscriptions.....	850	850
E-18 Collateral Public Relations with other committees.....	500	500
E-19 N. C. Rescue Squad First Aid Trophies.....	200	200
	<u>\$ 8,200</u>	<u>\$ 7,900</u>

* Transferred to Executive Budget—A

F. ANNUAL SESSIONS (118th) CONVENTION BUDGET

F- 1 Program, Production of.....	\$ 2,000	\$ 2,000
F- 2 Hotel and Auditorium expense.....	4,400	4,400
F- 3 Publicity promotion, expense of (reporters and expense).....	600	600
F- 4 Entertainment (general involving personnel).....	800	1,200
F- 5 Orchestra and Floor entertainment.....	2,500	2,500
F- 6 Guest Speakers (5) expense and/or honorarium.....	900	900
F- 7 Banquet Speaker, fee and expense.....	—0—	—0—
F- 8 Electric Amplification, operators, installations and screening auditorium.....	125	125
F- 9 Booth installations, supplies, expense signs, (Scientific and Technical) including exhibit expense & promotion.....	5,000	5,000
F-10 Projection, expense of (service rentals).....	1,300	1,300
F-11 Badges (members, guest, exhibitors, auxiliary).....	200	100
F-12 Reporting Service for Transactions—(House of Delegates, General Sessions and Reference Committees)	2,500	2,500
F-13 Rental, extra facilities, trucks for sections and/or exhibits.....	175	250
F-14 Exhibitors entertainment	750	750
F-15 Banquet expense	300	250
F-16 Police Security	350	350
	<u>\$ 21,900</u>	<u>\$ 22,225</u>

G. MISCELLANEOUS BUDGET

G- 1 Legal Counsel, retainer fees for.....	\$ 10,300	\$ 10,500
G- 2 Reporting, Executive Council Meetings.....	2,000	2,000
G- 3 Fifty Year Club Pins and Certificates, and President's Jewel.....	250	150
G- 4 Contingency and Emergency.....	2,294	4,82
G- 5 Retirement System for Society Employees.....	12,000	19,300
G- 6 Advalorem Taxes (MSSNC Property on Hwy. 70).....	915	96
G- 7 Association of Professions.....	200	200
G- 9 AAMC (Association of American Medical Colleges).....	250	250
G-10 Commissioners, expense of.....	1,500	1,500

	1971	1972
G-11 Executive Committee, expense of.....	300	300
G-12 Officers, expense	3,000	3,000
G-13 Travel and Maintenance, expense of essential Headquarters Staff for out of state sessions and conferences.....	1,000	1,000
	<u>\$ 34,009</u>	<u>\$ 43,981</u>

M. HEADQUARTERS FACILITY*Capital Investments*

	1971	1972
M- 1 Application to Mortgage Payments—estimated available.....	50,000	134,374
M- 2 Application to Purchase of New Furniture & Fixtures and/or Mortgage Payments	66,672	—0—
M- 3 Mortgage Payable on Greenfield Property @ 1/5 of \$13,000 plus 7% interest on unpaid balance of \$7,800 (\$2,600 plus \$546 interest).....	3,328	3,146
M- 4 Estimated Interest Cost on Mortgage (\$464,000 @ 7%).....	40,000	32,480
Subtotal	160,000	170,000

Operating Costs

M- 5 Utilities	8,000	13,000
M- 5 Insurance	1,350	1,400
M- 7 Taxes	16,000	15,680
M- 8 Water	700	700
M- 9 Janitorial Services	9,000	11,000
M-10 Grounds Maintenance	750	800
M-11 Building Repairs & Maintenance.....	900	1,200
M-12 Heating A/C Repairs & Maintenance.....	2,700	2,460
	199,400	216,240

REPORT B

Subject: Society policy favoring pluralistic system of health care.

Referred to: Reference Committee No. II.

The Executive Council, at its meeting on September 26, 1971, approved a recommendation from the Council on Review and Development that the Council recommend to the House of Delegates a policy statement to the effect that:

The Medical Society of the State of North Carolina supports a pluralistic health care delivery system, and the right of both patient and physician to choose the system within which they encounter each other, as long as that system exploits neither patient nor physician. The Society opposes governmental intervention on behalf of any one method of practice over all others, or any unfair competitive advantage. However, the Society is not opposed to experimental, demonstration, or pilot model projects in new systems of health care (including medical care) delivery.

REPORT C

Subject: Change in format of the Annual Meeting.

Referred to: Reference Committee No. I.

The Executive Council, at its meeting on September 26, 1971, approved two recommendations presented by the Council on Review and Development concerning a change in format of the Annual Meeting of the Society as follows:

- 1) That the Annual Meeting include two General Sessions instead of the present provision that there be held at least one General Session daily.
- 2) That the first meeting of the House of Delegates be held on Friday and the second on Sunday, with the Reference Committee hearing held on Saturday.

In approving these recommendations, the Executive Council took into consideration the fact that it might take several years to effect these changes due to meeting space reservations already scheduled.

It was explained to the Executive Council that the thinking behind these proposals was twofold. First, it has been suggested by many that, in general, physicians can better get away from their practices towards the end of the week than the beginning of the week. Second, this type of format would also accommodate more time for the specialty sections in keeping with the Society's avowed policy of upgrading the scientific content of the specialty sections in cooperation with the respective specialty societies.

REPORT D

Subject: Conflict of Interest in Medical Society Committees.
Referred to: Reference Committee No. I.

The Executive Council, at its meeting on September 26, 1971, considered a report in regard to conflicts of interest in Medical Society committees.

The discussion centered around the proper medical ethics of a committee member refraining from participation in the deliberations of a case in which he is involved.

After considerable deliberation, the Executive Council approved the following motion: "It is the opinion of the Executive Council that no physician should participate in the peer review of any case in which he has been a consultant, or has received or is eligible to receive remuneration from a third party payor."

REPORT E

Subject: Proposed Changes in the Constitution and Bylaws.
Referred to: Reference Committee No. III.

CONSTITUTION CHANGES

The following items were presented to and accepted by the House of Delegates at the Annual Convention in 1971 and are now presented to the House of Delegates for final action. These items have been recommended by the Executive Council and also the Committee on Constitution and Bylaws.

1. Grammatical revision of the Constitution and Bylaws.
2. Name change of The Society to *North Carolina Medical Society*.

The following items are now presented to the House of Delegates for acceptance at this meeting with final action to be taken at the 1973 Annual Meeting of the House of Delegates. These items have been recommended by the Executive Council and also the Committee on Constitution and Bylaws.

1. It is proposed that the Section regarding Life Members, Article IV—Members of The Society, Section 6—Life Members, page 3 of the Constitution, the first sentence be revised to read as follows:

"Life Members shall consist of those members of The Society who shall have retired from the active practice of medicine on or after the age of 65 and who shall have been a dues paying member for 30 years, or who upon reaching the age of 70 shall have been a dues paying member for 20 years."

The remainder of the paragraph would be unaltered.

2. It is proposed that the General Sessions at the annual meeting be changed to two general sessions at each annual meeting rather than one general session held daily. This can be accomplished by changing the Constitution, Article VII—Meetings and Sessions, to read as follows:

"The Society shall hold an annual meeting, during which there shall be held at least two general sessions, which shall be open to all registered members and to other members as provided under Article IV above."

3. The ad hoc Committee on Specialty Sections proposes that the House of Delegates allow one delegate from each specialty section to be a member of the House of Delegates each year. This can be accomplished by changing the Constitution Article V—House of Delegates, page 5, to read as follows:

"The House of Delegates shall be the legislative and business body of The Society, and shall consist of (1) Delegates elected by the component county societies and delegates elected by the student members, (2) ex officio the past Presidents and past Secretaries and the officers of The Society as defined in this Constitution, and (3) Delegates elected by the Specialty Sections as listed in Chapter XI, Section 1, of the Bylaws."

BYLAWS CHANGES

The following proposed Bylaws changes are presented to the House of Delegates for action at this Annual Meeting. These items have been recommended by the Executive Council and the Committee on Constitution and Bylaws.

1. This item pertains to a request from the Nominating Committee regarding changing the term of office of the members of the Nominating Committee to three years. This can be accomplished by changing the part of Section 2, Chapter V, page 17, of the Bylaws that now reads "No member of the Nominating Committee shall be eligible to succeed himself but one time, thereby limiting his eligible elections to two consecutive terms. He may, however, be elected again to said committee after a lapse of one year out of office on the committee." To accomplish the proposed change the following should be substituted for the above two sentences:

"Beginning with the May, 1974 Annual Meeting, elections to the Nominating Committee will be for

a term of three years. At the May, 1973 Annual Meeting, one member from each of the first, fourth, and eighth districts will be elected for a full term of three years; one member from each of the second, sixth, and tenth districts will be elected for a partial term of two years; and one member from each of the third, fifth, seventh, and ninth districts will be elected for a partial term of one year. At each annual meeting thereafter, members of the Nominating Committee will be elected to replace members from the same district whose terms expire that year. No member of The Society shall be elected to the Nominating Committee for more than one full three year term unless he shall have been off the Nominating Committee for at least three years."

2. The next item pertains to establishing a Section on Urology. It is proposed that a Section on Urology be established as part of the regular scientific program of The Society and recognized as a major practice specialty of The Society. This can be accomplished by adding the term "Urology" to the Bylaws, Chapter XI—Sections, Section 1, page 43, line 7, after Dermatology. Also in the Bylaws, Chapter X—Committees, Section 16, page 39, regarding the Blue Shield Committee, the term "Urology" shall be added on line 9 after "public health and education," so line 9 would read "orthopaedics, dermatology, public health and education, and urology." This would incorporate the specialty Urology on the Blue Shield Committee. In keeping with the provisions of this same Section 16, the Committee on Blue Shield shall now consist of 28 members. This can be accomplished by changing the number 26 to 28 on line 2 of Section 16, Chapter X of the Bylaws. To clarify a question about members being elected to the Committee on Blue Shield, Chapter X—Committees, Section 16, page 39, a new sentence should be added to Section 16, line 12, after the word "year," to read as follows:

"The two members representing each of the major practice specialties shall be from different medical districts."

Also in order to clarify the continuation of the election of members of the Committee on Blue Shield from any newly created Section, such as the Section on Urology, the following proposed new sentence should be added to Section 16, page 39, Chapter X—Committees, of the Bylaws following the above proposed added new sentence. This new sentence should read as follows:

"When any new section or major practice specialty is created by The Society and added to the Committee on Blue Shield, at their first election one member representing that newly created section or major practice specialty shall be elected for a full term of three years and the other member shall be elected for a partial term of two years."

3. It is requested by the Orthopedists to change the name of the Section on Traumatology and Orthopaedic Surgery from that terminology to "Orthopaedics." This can be accomplished by substituting in Section 1, Chapter XI, page 43, of the Bylaws, the word "Orthopaedics" for the words "Traumatology and Orthopaedic Surgery."
4. A proposal to change the Bylaws, Chapter IV—House of Delegates, Section 2, page 13, line 11, the sentence presently reading "Every delegate shall be a voting member of The Society or hyphenated Society which

he represents." To "Every delegate shall be a voting member of The Society and of the component society or hyphenated society or SAMA Chapter which he represents."

5. The Medical Societies of New Hanover County, Pender County, and Brunswick County have requested permission to organize a hyphenated county Medical Society to be called New Hanover-Brunswick-Pender County Medical Society. This can be accomplished by changing the Member County Societies of the Third District to "Bladen, Columbus, Duplin, New Hanover-Brunswick-Pender, Onslow, and Sampson." This is found in the Bylaws, Chapter VII, Section 1, page 22.
6. The following item pertains to a request by the Mediation Committee to allow the Mediation Committee to employ a reporter to be used at their meetings in order to handle clerical work, take testimony, take minutes, etc. This can be accomplished by changing the Bylaws, Chapter X—Committees, Section 9, Sub-Section g, page 31, which presently reads, "unless in a given case the committee determines that verbatim testimony should be taken, no person other than committee members and any witness then being heard, shall be admitted to any part of its proceedings when a complaint is being considered. Should the committee deem it necessary to take verbatim testimony, it may employ a competent shorthand reporter who shall be sworn to secrecy. No regular employee of The Society may be permitted to take notes or minutes in such matters." This could be changed to read as follows:

"Unless in a given case the committee determines that verbatim testimony should be taken, no person other than committee members and any witness then being heard, shall be admitted to any part of its proceedings when a complaint is being considered, except upon the affirmative vote of all of the members present of the Mediation Committee. Should the committee deem it necessary, it may employ a competent reporter who shall be sworn to secrecy. No regular employee of The Society may be permitted to take notes or minutes in such matters."

7. A proposal to change the Section on General Practice of Medicine to the Section on "Family Physicians." This can be accomplished by changing the Bylaws, Chapter XI—Sections, Section 1, page 43, the words "General Practice of Medicine" to the words "Family Physicians."

All reference to the term "general practice of medicine in the Constitution and Bylaws will be changed to the term "family physicians."

8. A proposal to change the name of the Committee on Necrology to the Committee on Memorial Services. This can be accomplished by changing the Bylaws, Chapter X—Committees, Section 2, page 27, the terms "Committee on Necrology" to "Committee on Memorial Services." Also change the Bylaws, Chapter X—Committees, Section 6, page 28, the first four words of the paragraph which now reads "The Committee on Necrology" to the words "The Committee on Memorial Services."

REPORT F

Subject: Statement of Policy on Drug Abuse and Drug Dependency.

Referred to: Reference Committee No. II.

The Committee on Drug Abuse proposed a Statement of Policy on Drug Abuse and Drug Dependency to the Executive Council at the September 26, 1971, meeting of the Council. The Council endorsed the following Statement of Policy on Drug Abuse and Drug Dependency:

WHEREAS, Drug abuse, as considered here, is the inappropriate and improperly supervised use of psychoactive drugs, usually taken by inhalation, ingestion, or injection, for the purpose of obtaining a gratifying psychic state from the toxic effects. Many different drugs are used by increasing numbers of our citizens in all walks of life, particularly our youth. The practice has now reached alarming proportions.

WHEREAS, Drug abuse is hazardous. Some individuals may seek unnecessary amounts of drugs with high potential for abuse, from one or several physicians, for their own use or illicit traffic. Some individuals may obtain drugs through illicit channels which lack quality control. The concentration may vary, and dangerous adulterants may be present. Unsterile technique of administration poses hazards. A variety of acute or chronic medical problems may result in death or disability. Continued use may lead to drug dependency.

WHEREAS, Drug abusing youth tend to migrate to alienated subcultures prone to illegal activities. These groups tend to govern themselves. An illegal drug trafficking subculture of suppliers and users will develop and enforce their own rules with swift severe punishment for offenders. The individual attracted to this subculture may find it difficult to leave.

WHEREAS, Repeated pleasurable experience may lead to psychological dependence in which the individual chronically craves the drug. Tolerance develops with repeated use of some drugs, wherein increasing dose is need to produce the desired results. Psychological dependency, in which a continued supply of drug is necessary to prevent uncomfortable withdrawal symptoms, develops with some drugs, particularly the narcotics and sedatives.

WHEREAS, Drug dependency (psychological and/or physiological) is a disabling medical disorder, characterized by periodic or chronic intoxication with a drug, in which the patient loses self control and becomes a liability to himself and society. He possesses a chronic striving to continue supplying his drug needs. The finer qualities of personality and good citizenship are lost. Choice of drug tends to migrate toward illicit expensive hard narcotics.

WHEREAS, Drug dependent individuals frequently resort to crime to support their drug habit. Since stolen merchandise may re-sell quickly for only a fraction of its value, the \$100 or more per day drug habit may cost the community several hundred dollars per day in theft. The desperate individual may resort to crimes against the person with resulting physical danger to the victim and himself.

WHEREAS, Some individuals, particularly the young maladjusted, or alienated are more susceptible to drug dependency. When introduced into a community, drug dependency spreads among susceptible peers like an epidemic.

WHEREAS, Traditional methods for treatment of drug dependency with forced hospitalization have not proven successful. More innovative techniques of community programs with multiple modalities combining education, treatment, rehabilitation, research, and law enforcement show promise of greater success.

Resolved, That the Medical Society is concerned about the rise in drug abuse and its potential hazards for the individual and community. The problem has now reached

proportions where organized effort is needed to combat it.

Resolved. That the physician, by virtue of his knowledge of drugs, his position of leadership in the community, his capability for prescribing drugs, and his position in treating drug induced conditions, should assume leadership in developing drug abuse programs.

Resolved. That the physician should exercise particular caution when prescribing drugs with high potential for abuse, to prevent unnecessary amounts of the drugs being dispensed.

Resolved. That the Medical Society recommends community based drug abuse programs be developed to combat this problem where it starts. These programs should be as comprehensive as necessary for each community. They should combine the resources of local voluntary effort and existing agencies. They should include:

- 1) Preventive education presented in attractive manner for young people and education for adults to understand drug abusers.
- 2) Treatment of acute and chronic conditions related to drug abuse and dependency.
- 3) Rehabilitation of the drug dependent individual.
- 4) Research into new and better methods of treatment.
- 5) Law enforcement to reduce the supply and use of illegal drugs and to motivate dependent individuals to accept voluntary treatment.

Resolved. That individuals arrested for drug related violations should be evaluated by a physician for drug dependency. If this condition is found or professed they should be given appropriate treatment.

Resolved. That the medical schools should be encouraged to provide more drug abuse education for students and physicians, especially in their community education programs, and also an occupational hazard.

REPORT G

Subject: Rubella Immunization.

Referred to: Reference Committee No. II.

The Executive Council, at its September 26, 1971, meeting, approved a recommendation from the Committee on Child Health and Infectious Diseases that the following recommendation is made concerning the rubella immunization:

All women in the child-bearing age should be rubella hemagglutination inhibition antibody tested either through premarital or prenatal programming. If negative and not pregnant, should be immunized with counselling about the needs to prevent pregnancy for periods of time. If pregnant, that she be immunized immediately post-partum.

As information, the Committee on Child Health and Infectious Diseases also went on record as recommending that rubella vaccine certainly should be given to every girl by the time she reached twelve years or sixth grade. They consider there should be some possibility of getting into the school system to insure that every girl gets this vaccine.

As information, it was also reported to the Executive Council meeting on September 26, 1971, that the Committee on Child Health and Infectious Diseases approved the combination Rubella and Mumps vaccine.

REPORT H

Subject: Study of Feasibility of the Establishment of a Statewide Non-profit Foundation for Peer Review of Quality Medical Care.

Referred to: Reference Committee No. I.

The Executive Council, at its September 26, 1971, meeting, approved a resolution presented by the Committee on Peer Review as follows:

That the establishment of a statewide non-profit foundation for peer review of quality of medical care in North Carolina be studied by the Executive Council and that the Chairman of the Peer Review Committee be authorized to appoint a fact-finding subcommittee to make recommendations regarding the formation and duties of such a foundation to the Council at its next meeting in January.

Following the adoption of the above resolution, the Executive Council discussion considered the magnitude of the proposed work of the Committee on Peer Review and passed an additional action to the effect that the Committee on Peer Review be asked to seek some planning funds for the purpose of their activities. Their activities were described as studying the feasibility for such a foundation for peer review than planning for implementation.

At the January 30, 1972, meeting of the Executive Council a motion was passed to the effect that a peer review foundation is needed and the subcommittee of the Committee on Peer Review was instructed to continue its work on development of proposed Bylaws and Articles of Incorporation and bring the information back to the Council.

REPORT I

Subject: Section on Urology.

Referred to: Reference Committee No. III.

The Executive Council, at its January 30, 1972, meeting, received and gave its approval to a request that the Executive Council submit to the House of Delegates its recommendation that a Section on Urology be added to the other existing sections.

The request was submitted by Joseph Hooper, M.D., Jack Hughes, M.D., John S. Rhodes, M.D., and George G. Gilbert, M.D., Chairman, on behalf of the approximately seventy urologists in North Carolina who are members of the Carolina Urological Society.

REPORT J

Subject: Organization of a hyphenated county medical society: New Hanover-Brunswick-Pender.

Referred to: Reference Committee No. III.

The Executive Council, at its January 30, 1972, meeting, voted to recommend to the House of Delegates that approval be given to the request that the counties of New Hanover, Brunswick, and Pender be authorized to organize as a hyphenated county medical society.

Councilor for the Third District, Dr. Frank R. Reynolds, presented the request with the comment that for years, the physicians in Brunswick County and Pender County have met with New Hanover County and paid dues to New Hanover County.

The New Hanover County Society and the physicians in Brunswick and Pender County now recommend that the name of the Society be changed to the New Hanover-Brunswick-Pender County Medical Society.

PRESIDENT STYRON: Next, I wish to report to you on the meeting of the Executive Council held on Sunday May 7th, 1972. While we do not have the verbatim minutes back from the reporter for this meeting, we will report to you on the actions at that meeting anyway.

For the May 7th meeting, Reports "K" through "P" have been developed which I will now present to you by subject only.

REPORT K

Subject: Report of the Mediation Committee.

Referred to: Reference Committee No. I.

At the January 30, 1972, meeting of the Executive Council,

cil, the Committee on Medicare brought to the attention of the Executive Council certain information furnished to it by the Medicare carrier for North Carolina. The Executive Council after discussion referred the matter to the Mediation Committee with a request that the committee report its recommendation to the Executive Council.

In its report to the May 7, 1972, meeting of the Executive Council, the Mediation Committee included the following Society policy in its recommendation, which were approved by the Council:

It be the policy of Society, henceforth, that all complaints originating from insurance carriers or intermediaries (third parties) dealing with improper utilization of services and facilities as well as inappropriate charges for services by physicians be first reviewed by one of the committees of the Society which perform peer review functions; and that only after the accused physician has been notified, appropriate hearing held, and an opinion rendered, should that committee refer the matter to the Mediation Committee for further opinion or recommendation for action. Excepted from this full procedure would be questions of committee jurisdiction in a given case wherein the Chairman of potentially involved committees did not agree after informal conference. In this situation a referral may be made to the Mediation Committee for the purposes of mediating the difference to opinion or the Executive Council in matters of interpretation of the Bylaws relating to jurisdiction and upon such referral to the Mediation Committee that committee may assume jurisdiction in the matter if it seems to be in the best interest of the Society doing so in accordance with charges to the Mediation Committee in the Bylaws of the Society.

Those committees performing peer review functions be notified of the established policy as outlined in the Recommendation above.

REPORT L

Subject: Problem of Insurance Industry Determination of Fees (Reasonable Charges)

Referred to: Reference Committee No. I

At the Executive Council meeting of May 7, 1972, the Chairman of the Insurance Industry Committee discussed recent interference by the Insurance Industry in informing patients that a reasonable fee for services would be determined by the insurance company, and that in the event that the physician charged more than the insurance company allowed, the company would in turn pay the patient's legal expense, plus court costs and penalties, if a court ruled for the doctor. This practice is designed primarily for group insurance but could occur at any level of coverage.

It was pointed out that such determination and practice by any insurance company indicates negotiation for physicians' services without the participation or acceptance by the physician and that physicians will not accept such a practice by a private carrier.

It was further pointed out this was an invasion of the relationship existing between physicians and patients and that any fee determination will be made by the physician based on his agreement with the patient.

The Executive Council instructed the Executive Committee to consider these matters and to develop a policy for the Medical Society for presentation to the House of Delegates.

In accordance with these instructions of the Executive Council, the Executive Committee held a telephone con-

ference on Tuesday, May 16, 1972, and recommends to the House of Delegates the following proposed Statement of Society Policy:

It shall be the policy of the Medical Society of the State of North Carolina:

1. To advise it's members to reject any determination of professional fees by a third party
2. Fee negotiations should take place appropriately between the physician and the patient based on the concept of usual, customary, and reasonable.
3. The physician should aid the patient in obtaining appropriate benefits from the insurance company through itemized billing and if necessary completion of appropriate forms and the rendering of case summaries.
4. Any disagreement over charges should be mediated by appropriate Peer Review Committees of the Medical Society such as the Insurance Industry Committee or the Blue Shield Committee.
5. Insurance carriers and other third parties will be notified of this policy of the Medical Society, by the Executive Director, through the North Carolina Committee of the Health Insurance Council.

REPORT M

Subject: Medicaid Requirements Regarding Agreement, Acknowledgement, or Certification by Doctors and Other Providers of Service.

Referred to: Reference Committee No. II

At the May 7, 1972, meeting, the Executive Council was informed by representatives of the North Carolina Department of Social Services that Federal Regulations pertaining to the Medicaid Program require an agreement, acknowledgement or certification by doctors and other providers of service in order to comply with three program regulations. The substance of the three requirements are as follows:

1. Agreement to keep such records as are necessary to disclose fully the extent of services provided to individuals under the State's Title XIX plan and to furnish information regarding any payments claimed for providing such services as the State Agency may request.
2. Acknowledgement of understanding that payment is from Federal and State funds, and any false claims, statements, or documents or concealment of a material fact may be prosecuted under applicable Federal or State laws.
3. Agreement to accept, as payment in full, the amounts paid by the Medicaid program.

Discussion with officials of the N. C. Department of Social Services revealed that the requirements could be met in the following manner: Number 1 by individual agreement with each provider or by language on claim form, Number 2 by language on claim form or by check endorsement, Number 3 by language on claim form.

Following considerable discussion, the Executive Council approved a motion to transmit this information to the House of Delegates with its recommendation that the wording on claim forms was the preferred method of compliance.

REPORT N

Subject: Resolution to the American Medical Association encouraging the use of every available communication technique to Disseminate Topical and Accurate Information to physicians and the Public.

Referred to: Reference Committee No. II

The North Carolina Delegation to the American Medical Association at the 1971 Clinical Meeting in New Orleans, felt some concern about the adoption of Resolution 62, which resolution "Resolved, that the AMA refrain at this time from engaging in the field of developing and distributing taped scientific medical informational materials for physicians since continuing medical education materials are already available." The North Carolina Delegation felt that this action was contrary to the very purpose of the AMA.

At the May 7, 1972, meeting of the Executive Council, Dr. David G. Welton, as a representative of the North Carolina Delegates to the AMA, presented the attached proposed Resolution to be submitted to the AMA. The Executive Council approved the Resolution.

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES
Introduced by: North Carolina Delegation

Subject: Use of Every Available Communication Technique to Disseminate Topical and Accurate Information to Physicians and Public.

WHEREAS, the American Medical Association was formed to promote the science and art of medicine and the betterment of public health; and

WHEREAS, the continuing education of the physician is an integral part of the practice of medicine today; and

WHEREAS, a well informed and understanding public is essential to optimum health for the nation; and

WHEREAS, modern communications aptness, including the use of print and audio-visual skills, are highly desired methods of influencing both the profession and the public; therefore be it

RESOLVE, that the American Medical Association be encouraged to use every available communication technique to disseminate topical and accurate information to physicians and the public; and be it further

RESOLVED, that Resolution 62 adopted at the 1971 Clinical Session be rescinded as not being consonant with the very purposes and objectives of the American Medical Association.

REPORT O

Subject: Suggested Change of Geographical Boundaries of Councilor Districts

Referred to: Reference Committee No. III

The House of Delegates in May 1971 directed that the Councilor Districts of the Medical Society be redrawn so that the members of the Society residing in any one District be more equitable, and that there be no increase in the number of Councilor Districts.

At its January 30, 1972 meeting, the Executive Council considered several proposals for redrawing the Districts as proposed by the House of Delegates in May 1971, but the Executive Council deferred any decision on the matter until the May Council meeting. At the January 30 meeting there was considerable sentiment expressed in the Council that any plan of redistricting based upon the number of physicians practicing in a given area, rather than based upon the territory or geographical area of each district, would result in one or more Councilors being requested to represent a much larger geographical area than he could possibly do without undue burden upon his time and efforts.

The May 7, 1972 meeting of the Executive Council reconsidered the action of the House of Delegates in May 1971, considered several proposals for redrawing the Councilor Districts, and passed a motion that the attached plan, marked Exhibit A, be submitted to the House of Delegates

to conform with the action of the House of Delegates, but that the Executive Council recommends its rejection.

(See Exhibit A on page 69.)

REPORT P

Subject: Efforts to Improve Patient Care

Referred to: Reference Committee No. I

The May 7, 1972 meeting of the Executive Council received and accepted the following Resolution from the Committee on Public Relations:

WHEREAS, the medical profession has made great strides in the prevention of disease and the alleviation of human suffering;

WHEREAS, there is an ever widening gap between increased health knowledge and its application; and

WHEREAS, health education is one of the keys in prevention of illness and maintenance of good health; and

WHEREAS, the physicians are the primary providers of health care and education; therefore, be it

RESOLVED: 1. Efforts be undertaken to improve patient care and most effectively utilize physicians time through better methods of health information transfer.

2. Support be given to the proposed project by the North Carolina Health Council to make the office of each health practitioner a miniature health learning center by the development of new audio-visual capabilities.

3. That physicians in practice be encouraged to participate in the project for the determination of:

a. What health educational practices are now being performed.

b. What health educational needs are in practitioners offices.

c. How these needs can best be met.

SPEAKER DAVIS: May I please have a motion that these reports be received by the House of Delegates?

[The motion was severally made and seconded from the floor.]

Is there any discussion?

[No response]

Any question about these reports from the Executive Council?

[No response]

If not, those favoring the motion, please say "aye"; opposed "no."

The motion is carried.

Dr. Styron!

PRESIDENT STYRON: Further actions at the May 7th meeting which the Council did not feel would require a special report are also submitted herewith for your information and approval.

These other actions were Resolutions 5, 6, 7, 8, 9 and 10, received and referred to the House of Delegates.

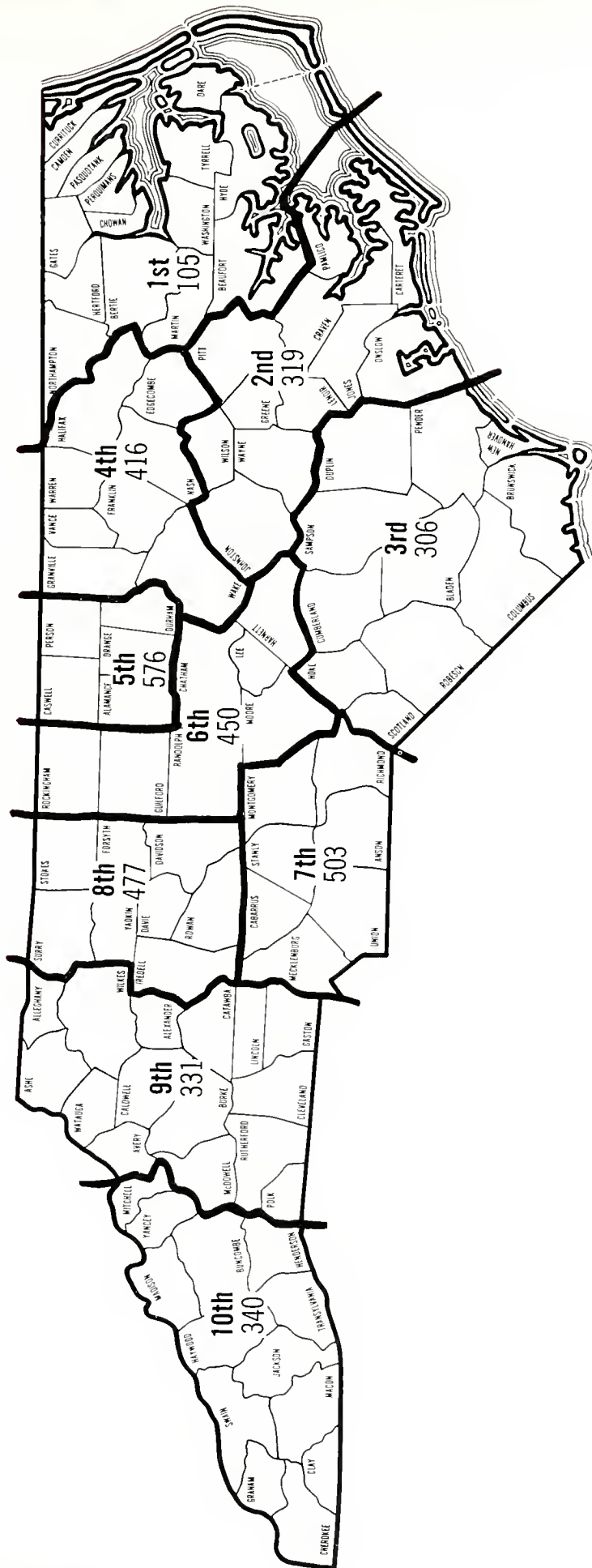
Resolutions 5, 6, 7 and 8 were mailed in the delegates kits. Resolutions 9 and 10 were received too late to be included in the kit and are on the table before you.

The Council endorsed the recommendation of the Committee on Disaster and Emergency Medical Care that the responsibility for coordinating emergency medical care activities be reassigned to the State Board of Health.

Approved the landing of a military helicopter on the hotel grounds at Pinehurst during the annual meeting as a helicopter and disaster medical equipment display of how military helicopters can be utilized to provide assistance to civilian victims of emergencies including traffic accidents.

Approved the appointment of a committee to work with the American Association of Physicians' Associates on the

EXHIBIT A
PROPOSED REVISION COUNCILOR DISTRICTS



exploration of ways to instigate liaison between the two organizations.

Passed a motion to the effect that the matter of preservation of manuscripts and possible publication of materials having to do with the "History of Medicine in North Carolina" not published in the two-volume history, be considered by the Committee on Archives and History as well as the Editorial Board of the NORTH CAROLINA MEDICAL JOURNAL for further recommendations to the Council.

Endorsed the Sanford High School Future Physicians Club and commended its members for their efforts in its formation and activities.

Elected a North Carolina Med-Pac Board of Directors.

Mr. Chairman, this completes the report from the Executive Council and I move that this report be accepted by the House.

SPEAKER DAVIS: Is there a second to this motion? [The motion was severally seconded from the floor.]

Those favoring the motion, please say "aye"; opposed "no."

The motion is carried.

Thank you, very much, Dr. Styron.

RESOLUTIONS

VICE SPEAKER CARR: The next item is consideration of Resolutions which are in your kit.

I will explain 9 and 10 to you. Nine and 10 were received too late and they will be introduced as new business and if they are approved, they can be received by the House of Delegates on a two-thirds vote. They will be presented to you later for your consideration as to whether they will be accepted and sent to Reference Committees.

Resolutions are submitted by committees and by component medical societies and we're going to ask, when I read the title of the Resolution, that the chairman of the delegation or his designate be near a microphone to read the resolve, not the entire resolution but the resolve, so you can be identified with your Resolution.

Resolution: 1

Introduced by: Wake County Medical Society

Subject: Resolution Against the Use of Amphetamines and Methamphetamines

Referred to: Reference Committee No. II

The amphetamines and methamphetamines have been shown to possess great potential for abuse, and

There is abundant medical evidence to support their danger when used in appetite control, and

The Wake County Medical Society is concerned about the alarming drug abuse with these drugs by both youth and adults.

It is resolved that the members of the Medical Society of the State of North Carolina use no amphetamines or methamphetamines for appetite control and that the use of these drugs be restricted to the treatment of narcolepsy, hyperkinetic children, and other disorders which in the opinion of the patient's physician will be beneficial.

Resolution: 2

Introduced by: Craven-Pamlico County Medical Society

Subject: Methods of Compulsory Continuing Medical Education

Referred to: Reference Committee No. I

Resolved, that the North Carolina Medical Society explore the various methods of compulsory continuing medical

education, with special reference to those methods used in the state of Oregon.

Resolution: 3

Introduced by: Duke Medical School Student Members of MSSNC and Durham-Orange County Medical Society
Subject: North Carolina General Statutes Concerning Abortion

Referred to: Reference Committee No. II

The General Statutes of the State of North Carolina should not restrict the individual physician's ability to provide the best possible health care for his patients, and

Many physicians have at one time or another had patients who clearly would have been helped by having a therapeutic abortion, and who requested their help in seeking a therapeutic abortion; yet the physician has very often not been able to act in a manner which would be in his patient's best interest because of the law, and

Most physicians recognize the importance of preserving a stable family structure in our society and that unwanted children often are a difficult emotional and financial burden for the family; and that couples forced into marriage because a young woman is pregnant are likely to have their marriage end in failure—a situation detrimental to the individuals involved and society as a whole, therefore be it

Resolved that the Medical Society of the State of North Carolina go on record as considering an abortion to be an elective surgical procedure which should only be performed by a licensed physician; and further, that the decision to perform an abortion should rest solely with a woman and her physician; recognizing that the physician has the responsibility in each instance to make sure that his patient has fully considered the alternatives to terminating her pregnancy and is not being coerced into seeking an abortion. Furthermore, any physician whose personal beliefs are in conflict with the surgical interruption of a pregnancy should under no circumstances be required to perform an abortion, and be it further

Resolved that the Medical Society shall actively seek the passage of a bill concerning the interruption of pregnancy which incorporated the following provisions:

An abortion shall not be unlawful if it is performed before the twentieth week of gestation by a physician licensed to practice medicine in North Carolina upon the written request of the pregnant woman; and if it is performed in a hospital licensed by the North Carolina Medical Care Commission, or clinic, or other medical facility affiliated with a hospital licensed by the North Carolina Care Commission. An Abortion shall not be unlawful after the twentieth week of gestation if a physician shall certify that the health of the woman is in substantial danger to the pregnancy or that there is a clear risk that the child may be born with a serious physical or mental defect.

And finally, be it

Resolved that the Medical Society condemns the operation of profit making abortion referral agencies and will do all that it can to see that no such agencies are established in North Carolina.

Resolution: 4

Introduced by: Duke Medical School Student Members of MSSNC and Durham-Orange County Medical Society
Subject: Information Packet for the North Carolina General Assembly

Referred to: Reference Committee No. II

During debate on House Bill 5 in the 1971 session of the North Carolina General Assembly groups lobbying both for and against abortion reform supplied inaccurate information concerning abortion and contraception to members of the General Assembly, and

Some groups which are disseminating inaccurate information on the medical aspects of House Bill 5 and which were well organized and well financed distributed slick manuals purporting to support their point of view and took part in the public hearings on the bill, and

It is essential that legislators who are deliberating medical matters have before them reliable information, be it

Resolved that the Medical Society shall prepare and distribute to the members of the North Carolina General Assembly an information packet containing data on (1) the reliability and side effects of the current methods of contraception; (2) the experience of countries and states which have an abortion law similar to the one proposed in resolution number 3; and (3) the basic psychiatric and medical data concerning abortion and the battered child syndrome.

Resolution: 5

Introduced by: Committee of Physicians on Nursing

Subject: Any Expansion of the Function of a Nurse or Nurse Practitioner be Developed Under the Exemption 13 of N. C. General Statutes Section 90.18

Referred to: Reference Committee No. 1

BE IT RESOLVED that any expansion of the role of a nurse in assisting a medical doctor in his practice or in the expansion of the function of a nurse or so called nurse practitioner be developed under the Exemption 13 of North Carolina General Statutes, Section 90.18. This Exemption is intended to provide and provides for the expansion of the role of non medical personnel in accordance with regulations of the Board of Medical Examiners of the State of North Carolina and its procedures for the approval of persons authorized to act as assistant to physicians.

Resolution: 6

Introduced by: Committee on Blue Shield

Subject: Third Party Payors Payments to be Identical in Both Medical School Hospitals and Community Hospitals With Teaching Programs

Referred to: Reference Committee No. 11

WHEREAS, Housestaff teaching programs have existed in the medical school hospitals and in many community hospitals of North Carolina for many years, and

WHEREAS, the extension of such educational programs to many other communities and hospitals of the State is now being accomplished, and

WHEREAS, North Carolina Blue Cross and Blue Shield, Inc., and other third party payors, now have a satisfactory means of compensating, under terms of their subscribers' contracts, the medical school hospitals for professional services rendered, including those done in a teaching capacity, be it therefore

Resolved, that the Medical Society of the State of North Carolina request of North Carolina Blue Cross and Blue Shield, Inc., and other third party payors, that the means of determining the amount of compensation, and the manner of making such payment, be identical in both medical school hospitals and community hospitals with teaching programs.

Resolution: 7

Introduced by: Mecklenburg County Medical Society

Subject: Frequency of Physical Examinations now Re-

quired of all Teachers in the NC School System Under PL 115-143

Referred to: Reference Committee No. 1

Annual physical examinations are now required of all teachers and certain other personnel employed in the North Carolina School System and

The frequency of physical examinations should be determined by the personal physician and not by legislative fiat, therefore be it resolved that

The Mecklenburg County Medical Society favors periodic physical examinations for all individuals and that the frequency of such examinations should be decided by the personal physician in consultation with his patient.

That Public Law No. 115-143 should be repealed.

That pre-employment physical examinations should be required of teachers and other personnel designated in PL 115-143 at the time of their initial employment in a particular school system.

That annual screening for tuberculosis be required of such teachers and other personnel and provided without cost to them through County Health Departments.

That a copy of this resolution be sent to the Mecklenburg County Legislative Delegation and presented to the Annual Meeting of the North Carolina Medical Society.

Resolution: 8

Introduced by: Mecklenburg County Medical Society

Subject: Supporting the Labeling of all Prescription Medications With Legislation to Implement This Into Law

Referred to: Reference Committee No. 1

We consider the prompt identification of prescription medications is necessary to good patient care and

Be it resolved that the Medical Society of the State of North Carolina go on record as supporting the labeling of all prescription medications as prescribed unless the prescribing physician directs otherwise on each individual prescription and

Be it further resolved that the Legislative Committee of the Medical Society of the State of North Carolina be instructed to initiate development of legislation to implement this into law in the state of North Carolina.

Resolution: 9

Introduced by: Lincoln County Medical Society

Subject: Reaffirmation of Concerns of Colorado Medical Society for the American Medical Association

Referred to: Reference Committee No. 11

WHEREAS, there exist with physicians a genuine concern for the AMA and the role it should take in American Medicine, and

WHEREAS, this concern for the AMA has been well expressed by certain views produced at a "town meeting" forum of the Colorado Medical Society, and

WHEREAS, these views seem to need to be re-echoed and supported, therefore, the Lincoln County Medical Society resolves to endorse and recommend to the North Carolina Medical Society for endorsement the following opinions which are to be presented to the AMA Convention by the Colorado Medical Society in June of 1972:

1. "Matters to come before the AMA meetings are not received in time for the component societies to consider them and to make an enlightened comment to the pre-AMA conference held before each AMA convention."
2. "Substantial minority dissent received no attention but should be reported."

3. "Polls and opinion samples should be circulated to members and non-members alike."
4. "Is the present system of representation truly representative? A tenure limit should be enacted. Newer members should be charged with specific responsibilities in order to get them involved."
5. "If the mechanism for change is available, it needs a shock treatment to get it pumping effectively, such as the elimination of some over-perpetuated councils and committees."
6. "Candidates for the offices of president, vice president, and trustee should present a platform, not just a curriculum vitae."
7. "Large city, county, and state societies are plagued by the same problems as the AMA and should hold similar hearings."

Our delegate, Dr. John Gamble, will be prepared to discuss this resolution and if further information is necessary please contact either I (R. M. Stevenson, M.D.) or Doctor Gamble.

Resolution: 10

Introduced by: Guilford County Medical Society
Subject: Representation on Health Planning Councils
Referred to: Reference Committee No. I

WHEREAS, recent legislation now required approval of plans for new or enlargement of medical facilities by the Medical Care Commission, and

WHEREAS, there has been and continues to be a proliferation of local and regional health planning councils, and

WHEREAS, these agencies are requested by the Medical Care Commission to investigate and make recommendations regarding requests for additional hospital beds and medical care facilities.

THEREFORE, BE IT RESOLVED THAT the Guilford County Medical Society requests that the Medical Society of the State of North Carolina go on record as favoring the concept of each local and regional planning council should request that at least one *official delegate* be appointed from the local county medical society in that area or region to be a member of its executive committee.

BE IT FURTHER RESOLVED THAT the Guilford County Medical Society recommends that the Medical Society of the State of North Carolina use its good office and the expertise of its staff to help secure such representation on planning councils, and furthermore that the Medical Society of the State of North Carolina offer professional consultation to health planning agencies in those instances where this consultation is requested and could be feasibly rendered.

VICE SPEAKER CARR: That completes the resolutions.

May I have a motion to accept these resolutions by the House for further action by the Reference Committees?

[The motion was made and seconded from the floor.]

Any discussion?

[No response]

All in favor say "aye"; opposed "no".

The motion is carried.

SPEAKER DAVIS: The House is now about ready to recess for purposes of district caucuses for each district to select a nominee to the Nominating Committee.

I would stress that these are only nominations to this committee. The House will have to elect them. We will ask the Chairman of each caucus to assume the responsibility of forwarding to the podium the name your group selects.

I would remind you that a member of the Nominating

Committee can hold no other office in the Society and I'm told that only one member of the Society is currently ineligible for this committee and that is Dr. Zack Owens.

We now stand in fifteen minute recess and each district will please caucus immediately in front of the sign as you see them around the hall.

[Whereupon there followed a fifteen minute recess for the purpose of district caucuses.]

Gentlemen, may we come back to order?

May we please come back into session!

The nominees for the Nominating Committee as submitted by district caucus are from:

- 1st District, Dr. John R. Payne;
- 2nd District, Dr. Elliott Dixon;
- 3rd District, Dr. Jerry Pence;
- 4th District, Dr. Lewis Thorp;
- 5th District, Dr. Joseph Baggett;
- 6th District, Dr. Thomas Dameron;
- 7th District, Dr. Thomas Dulin;
- 8th District, Dr. Roy S. Clemmons;
- 9th District, Dr. Thomas Fitz;
- 10th District, Dr. Harry Summerlin, Jr.

May I have a motion that nominations be closed and these men be elected to the Nominating Committee.

[The motion was severally made and seconded from the floor.]

All those in favor of the motion please say "aye"; opposed "no".

SPEAKER DAVIS: All those favoring the motion that these be elected to the Nominating Committee, please say "aye"; opposed "no".

The slate is elected.

The House is now open for new business.

DR. PHILIP PEARCE: Delegate Pearce from Durham-Orange County!

I have a resolution that I'd like to present from the delegates of Durham-Orange County Medical Society.

SPEAKER DAVIS: Dr. Pearce, would you state briefly the nature of this resolution for as you know it will require a two-thirds affirmative vote of the House to accept the resolution.

DR. PEARCE: It has to do with better communications and information between the Board of Medical Examiners and the physicians in the State of North Carolina.

SPEAKER DAVIS: Dr. Pearce has moved that the House allow this resolution to be accepted. Is there a second?

DR. KOONCE: Second.

SPEAKER DAVIS: Those in favor please say "aye"; opposed "no".

The motion is carried.

We do accept your resolution, Dr. Pearce. It will become Resolution No. 11 and will be referred to Reference Committee I.

Resolution: 11

Introduced by: Delegates of Durham-Orange County Medical Society

Subject: Resolution for improvement of relations between the Board of Medical Examiners and the physicians in the State of North Carolina

Referred to: Reference Committee No. I

WHEREAS, all physicians of the State of North Carolina are required by General Statute 90-15.1 to register with the secretary-treasurer of the Board of Medical Examiners by January 1st of each even numbered year, and if registration is not completed by February 1st, a fine is

levied and the physician is subjected to threat of a hearing and possible suspension of license to practice medicine if fine is not paid, to wit:

1. The fee is not a regular annual fee and is thus harder to remember.
2. No competent, intelligent physician who has been previously examined and certified by the Board of Medical Examiners would willfully refuse to pay this just fee.
3. In this past year approximately 10% of our previously registered physicians were declared delinquent, many of whom claimed they received no notification or that their fee was mailed and apparently not received by the Board.
4. The Board has arbitrarily and uniformly applied the fine to all physicians without regard to the possibility of an error being made in the office of the Board or by the mails.
5. Many of the members of the Medical Society feel that the Board has required rigid compliance within the letter of the law rather than follow a policy within the law that would facilitate every physician's registration and compliance with the law.

BE IT THEREFORE RESOLVED that the Medical Society of the State of North Carolina:

1. Request the Board of Medical Examiners to mail out a first notification of the required biennial registration in November instead of December, and
2. That if a physician has not registered by January 1st

he be sent a final notice and a reminder of the legal implications if registration is not completed by February 1st.

Is there other New Business?

[No response]

DR. CLEMMONS: No, sir. It was Resolution No. 10 and it got to the House.

SPEAKER DAVIS: Is there any other New Business?

[No response]

If not, may I again remind you of Dr. Hoffman's address tomorrow morning during the First General Session at eleven-thirty, the President-elect of the AMA; and remind you that Reference Committees will meet at two o'clock tomorrow afternoon at the sites specified on your pink sheets.

May I ask please that the new elected members of the Nominating Committee meet immediately with the Secretary in Room 123 and this is to your left as you leave the Cardinal Ballroom.

And, if there is no other business, may I again express our appreciation to the staff for all the laborious work which they do so well and ask for a motion to adjourn.

[The motion was duly made and seconded from the floor.]

Those favoring the motion to adjourn, please say "aye"; opposed "no".

We are adjourned.

[The meeting adjourned at four-thirty-six o'clock.]

Abridge Minutes of the Meetings of the House of Delegates

TUESDAY AFTERNOON SESSION

May 23, 1972

The Second Meeting of the House of Delegates of the Medical Society of the State of North Carolina convened at two-ten o'clock, Dr. James E. Davis, Speaker of the House of Delegates, presiding.

SPEAKER DAVIS: Will the adjourned session of the House of Delegates please come to order?

Dr. Wilkerson, may we please have a report from the Credentials Committee.

DR. WILKERSON: Mr. Speaker, we have 122. Which constitutes a quorum.

SPEAKER DAVIS: Thank you, sir, and the House is open for business.

I will ask the same Tellers which were appointed on Sunday to please serve today.

Dr. Roy Bigham will act as Chief Teller; with him Dr. Robert Lincoln, Dr. Charles Nicholson, Dr. Albert Stewart and Dr. D. E. Ward.

REFERENCE COMMITTEE REPORTS

Another word of explanation which comes up every year and it's an understandable point of confusion and that is, as these resolutions are offered by the Reference Committee, we will vote on the resolution itself. Be not confused by the recommendation which the committee brings you and the rationale is, of course, that the resolution came to the House, it is a possession of the House, it has been referred to the Reference Committee for study and for a recommendation.

This is one source of information for you to consider

in making your decision as to whether to vote yes or no on the resolution.

So, if you are in favor of a resolution and even though the Reference Committee might recommend that you reject it, if you are in favor of the resolution you vote "aye"; if you're against the resolution you vote "no".

You are not voting on the recommendation of the committee. You are voting on the resolution itself.

REFERENCE COMMITTEE I

I now recognize Dr. Thornton Cleek, Chairman of Reference Committee I.

[Whereupon Dr. Cleek came forward to the floor podium and the other members of his committee, Dr. Baggett and Dr. Nicholson, took their places beside him.]

DR. THORNTON R. CLEEK [Chairman, Reference Committee I]: Reference Committee I submits to the House of Delegates the following report:

REPORT A

Report "A", Subject: The Annual Budget Estimates for 1972.

The committee recommends adoption of this report and I so move.

SPEAKER DAVIS: The Reference Committee containing multiple membership, automatically when they recommend they also second the recommendation, so seconds are not necessary.

You have heard the motion that Report "A" be accepted.

Is there discussion or are there questions concerning items contained in the budget?

[No response]

If not, those favoring acceptance of Report "A", please let it be known by saying "aye"; opposed "no".

It is accepted.

REPORT C

DR. CLEEK: Report "C", Subject: Change in format of the Annual Meeting.

The committee recommends adoption of this report and I so move.

SPEAKER DAVIS: Report "C" has been moved and seconded. Is there discussion?

[No response]

If not, those favoring acceptance, please let it be known by saying "aye"; opposed "no." It is accepted.

REPORT D

DR. CLEEK: Report "D", Subject, Conflict of Interest in Medical Society Committees.

The committee recommends adoption of this report and I so move.

SPEAKER DAVIS: Report "D" is before you for adoption or rejection. Is there discussion?

[No response]

If not, those favoring adoption please let it be known by saying "aye"; opposed "no". It is adopted.

REPORT H

DR. CLEEK: Report "H", Subject: Study of Feasibility of the Establishment of a Statewide Non-Profit Foundation for Peer Review of Quality Medical Care.

The committee recommends adoption of this report and I so move.

SPEAKER DAVIS: Report "H" is before you for adoption or rejection. Is there discussion?

[No response]

Those favoring adoption, please say "aye"; opposed "no". It is adopted.

REPORT K

DR. CLEEK: Report "K", Subject: Report of the Mediation Committee.

The committee recommends adoption of this report and I so move.

SPEAKER DAVIS: Report "K" is before you for adoption or rejection. Are there any questions or discussion?

[No response]

Those favoring adoption, please say "aye"; opposed "no". It is adopted.

REPORT P

DR. CLEEK: Report "P", Subject: Efforts to Improve Patient Care. The committee recommends adoption of this report and I so move.

SPEAKER DAVIS: Report "P" is before you and for adoption or rejection. Any questions or discussion?

[No response]

If not, those favoring adoption of Report "P", please say "aye"; those opposed "no". Report "P" is accepted, and adopted.

RESOLUTION NO. 2

DR. CLEEK: Resolution No. 2, Subject: Methods of Compulsory Continuing Medical Education.

The committee recommends adoption of this resolution and I so move.

SPEAKER DAVIS: Adoption of Resolution No. 2 is before you, and the recommendation from the Reference Committee that it be adopted. Is there any discussion?

DR. BRUCE BLACKMON [Harnett County]: Mr. Chairman, I think maybe this needs a little exploration by the group. I'm certainly not opposed to extended education from here on, but I am concerned when any time we as a body go on record to the point that a man might lose his license to practice medicine in North Carolina once he has received that.

SPEAKER DAVIS: Thank you, sir. Next at Microphone four!

DR. ROY S. CLEMMONS [Guilford County]:

I am somewhat at a loss to understand what is meant by the "Oregon method." Perhaps this could be explained to the body.

SPEAKER DAVIS: Does anyone care to respond to the question?

DR. CARL J. HILLER [Craven-Pamlico County]:

There are two or three points in the Oregon system.

Over a period of time, a point system is arranged where a physician takes various courses and of course the compulsory portion comes in, he gets so many points and if he fails to do so, he doesn't lose his license by losing so many points but it's based on membership in the society. It was our feeling that such a system will come to pass, if not within the society, certainly without the society. I think to discuss the pros and cons of compulsory continuing education at this point perhaps would be out of order, except that the resolution simply states that we want this to be explored.

SPEAKER DAVIS: Are you speaking in favor of exploration? Are you speaking for adoption of the resolution, or against it, as stated?

DR. HILLER: The resolution simply says to explore. Yes, I am in favor of the resolution.

SPEAKER DAVIS: Thank you, sir.

Is there further discussion on Resolution No. 2?

DR. AMOS JOHNSON [AMA Delegate]: Mr. Speaker, Amos Johnson from Sampson County!

I'd like to speak for this resolution.

This, in effect, I believe, would lead towards the creation of a system of recording continuing education efforts by the membership of this State Society over a period of years which would be very similar to the system which was adopted twenty-seven years ago by what was then the American Academy of General Practice which is now the American Academy of Family Physicians. This has proven to be a very acceptable and a very worthwhile method of assuring a measure of continuing education by all of our membership.

The Academy would not permit renewal of membership in the Academy after a period of three years time unless the person involved had shown at least an average of fifty hours of continuing education for each of the three years involved which would amount to a hundred and fifty hours.

Gentlemen and ladies, this would be about the least thing we could possibly do to assure the people of this country, the politicians of this country, those people who have shown a jaundiced eye in their evaluation of medicine, this would be about the least thing that we could do to show that we do intend to keep the quality of health care in this country abreast of the progress being made in scientific research and in medical education and I would

like very much to speak strongly in support of this resolution.

SPEAKER DAVIS: Thank you, Dr. Johnson.

Is there further discussion of Resolution No. 2?

[No response]

If not, it is before you for adoption or rejection, and the recommendation from the committee for its adoption.

Those favoring adoption of this say "aye"; opposed "no".

The "ayes" have it and the Resolution No. 2 is adopted.

RESOLUTION NO. 5

DR. CLEEK: Resolution No. 5, Subject: Any Expansion of the Function of a Nurse or Nurse Practitioner be Developed under Exemption 13 of North Carolina General Statutes Section 90.18.

The committee recommends adoption of this resolution and further recommends that the implementation of this resolution be jointly worked out by the Board of Nursing Examiners and the Board of Medical Examiners.

At the committee hearing, twelve people spoke at this meeting, five expressed themselves as mostly in favor of it, two expressed themselves against it and the rest was more or less clarifying information.

SPEAKER DAVIS: Thank you, Dr. Cleek.

Resolution No. 5 is before you for consideration and adoption. Is there discussion?

Microphone two!

DR. EDGAR T. BEDDINGFIELD, JR. [Wilson County]: I was at another Reference Committee, I was not able to be at Reference Committee I, but I speak vigorously in opposition to the resolution and the report of the Reference Committee.

In speaking in opposition, I might point out a little history of the relationship between the nursing profession and the medical profession, particularly what has taken place up until now.

Up until about six years ago, the relationship was not good. We were at each other's throats.

Fortunately, that situation has changed and whatever differences we have had we have been able to iron them out at conferences and have not had to wash dirty linen in legislative halls and some of the legislators are very grateful for this.

It is not cricket in the legislative game to extract part of a licensed group of nurses and to transplant them into another body licensed under the Medical Practice Act and this is vigorously objected to and I think justifiably so by the nursing profession and they have let us know it.

Now, all of us here, the older physicians of the membership have seen quite a transformation in the role of nurses.

I remember in the past twenty odd years, from time to time, inquiries that have come to the Executive Council and the House of Delegates from the Board of Nursing of the North Carolina Nurses Association as nurses began to take on new jobs.

I can even remember a question put to us, "Is it legal in the opinion of the Medical Society for nurses to do an intravenous infusion service?"

A little later on, the question was asked, "Is it all right for nurses to begin to do blood transfusions?"

The next question related to the passage of the nasogastric tube which is a common practice today.

Now, of course, the questions revolve around such things as coronary care units, cardiac arrest and so forth.

So, the nursing profession, as I say, and the interplay

between our two professions has been one of flexibility and these are things that defy expression in the statutes.

Now, I do not believe that for one moment that anybody in North Carolina, in either profession, either nursing or medicine, would envision or does envision separate, independent, unsupervised practice of medicine by nurse practitioners. This has not been proposed by any of the people active in this.

It is a fact that you can quote some phrases from certain individuals at the national level who expressed more or less a type of "Women's Lib" philosophy who say they are totally independent and capable of getting along without us.

That is not the case in North Carolina.

You have before you today another resolution which the House will get to in a while stating that the House will support innovation in health care delivery and I sincerely hope that that resolution passes.

This resolution we have before us would stifle innovation and would stifle the nurse practitioner.

I would therefore as a method of suggesting an appropriate course of action by the House in the treatment of this problem, would like to offer from the floor a substitute resolution.

SPEAKER DAVIS: It is in order.

DR. BEDDINGFIELD: The substitute resolution would be as follows:

Be it, **RESOLVED**, that the North Carolina Medical Society endorses, supports and encourages the expansion of the role of registered nurse as a nurse practitioner as a practical means of meeting some of the health care needs of the people of the State of North Carolina; be it further,

RESOLVED, that the North Carolina Medical Society go on record as insisting that the expansion of the role of the nurse as a nurse practitioner be done *only* when the nurse practitioner has a clearly defined relationship to a licensed practicing physician or physicians who shall bear medical responsibility for those parts of the nurses's role that go beyond the bounds of traditional nursing practice; be it further,

RESOLVED, that the North Carolina Medical Society recommends that the development of the nurse practitioner be accomplished under the supervision of a joint subcommittee of the Board of Medical Examiners and the Board of Nursing.

SPEAKER DAVIS: Is there a second to Dr. Beddingfield's substitute resolution for Resolution 5.

[The motion was seconded from the floor.]

Is there discussion of the substitute motion as offered by Dr. Beddingfield?

DR. WILLIAM B. McCUTCHEON [Durham County]:

I'd like to clarify the motion which was introduced by the Nursing Committee. We certainly had no intention of criticizing or demeaning, in any way, the expanded role of the nurses and I'm sorry that Dr. Beddingfield took it this way.

At the hearing yesterday before the Reference Committee, we made it very clear that we applaud and encourage the expanded role of the nurses. I would go one step further and say we must have this in order to perform and in order to meet the needs which are only too apparent to everyone.

I think the thing that many of you may not know is that there is a Legislative Research Commission currently active in exploring ways in which this expanded role of

the nurse which is already in existence can be made legal or lawful, if you will.

This Legislative Research Commission was authorized by the last session of the North Carolina State Legislature. Dr. Paschal is a member of this commission and they are exploring ways that the activities of the nurses can be made lawful and what activities are not lawful, whether or not they can be made lawful and the nurses are concerned about this, to the extent that they requested that joint practice committee be set up and was set up by Dr. Styron and has met during the past year. One of their concerns is what protection do they have.

Now, the real thrust of the motion of the committee was not concerned with the nurses who were working in intensive care units or emergency rooms. Our concern was with those nurses who are being trained and are sent out to distant locations where there is not a doctor sometimes within twenty or thirty miles and these nurses are concerned. They're concerned about being exposed from a legal point of view and I think rightly so.

I don't know what this Legislative Research Commission will come up with. Some of the things that have been mentioned as possible alternatives are changes in the Nursing Practice Act of North Carolina, changes in the Medical Practice Act of North Carolina, to make their activities lawful and to give legal sanction and legal protection to the nurses for the things they are already doing.

This is not for something new, this is what is already taking place in the State.

It was felt by our committee that they could be included under the Exemption which is currently extended to physicians' assistants since this group of people are functioning in this capacity as physicians' assistants frequently at remote locations far removed other than by telephone to practicing physicians. This is the intent of the resolution. The committee certainly had no intention to criticize and efforts that the nurses are making in this State and the country in the delivery of health care and I hope that this explanation will make that perfectly clear.

DR. E. HARVEY ESTES, JR. [Durham]: Mr. Speaker, I speak in favor of the resolution—I spoke yesterday in favor of the resolution as introduced and felt very strongly at that point, first, that there was no argument with the expanded role of the nurse. This, I support heartily.

The problem was the need for some legal system without opening up the Medical Practice Act and without opening up the Nursing Practice Act and this provided a mechanism for doing that.

I think though that Dr. Beddingfield's substitute resolution says what we intended to say, perhaps better than the original, so I support that.

SPEAKER DAVIS: Is there further discussion of the substitute motion that is before you?

[No response]

If not, do you understand the substitute motion?

If there is no other discussion, those favoring the substitute motion please say "aye"; opposed "no."

The substitute motion for Resolution Number 5 is adopted.

And, so, of course, we will not go back to the original motion.

RESOLUTION 7

DR. CLEEK: Resolution No. 7, Subject: Frequency of Physical Examinations now Required of all Teachers in the North Carolina School System under PL.115-143.

At the hearing, three people spoke, one for it, questions

were asked but answers could not be found on when this law was passed, did the Medical Society have anything to do with it. Since our meeting I have found out this was passed in the mid-fifties.

The committee recommends adoption of this resolution and I so move.

SPEAKER DAVIS: Thank you, Dr. Cleek.

Resolution No. 7 is before you and the recommendation of the Reference Committee that this be adopted.

Is there discussion?

DR. BEDDINGFIELD: Mr. Speaker, I'm not going to speak against the resolution, but I do have some questions about this one.

As I understand the resolution, it will provide for a method for screening individuals who might have active pulmonary tuberculosis which I suppose poses a great risk as far as communicable diseases are concerned.

However, a physical examination is required, I think in my recollection for several reasons. I believe that rightly or wrongly there is a requirement for accreditation. You see, this is one of many standards in a school so that when the Superintendent of Public Instruction goes to a national meeting, the Superintendent of Public Instruction says, "How many of you have physical examinations for all of your teachers, please raise your hands?" So this is one facet to be considered.

A more important facet I think is this, I know that as a practicing physician, and as an "x" number of school boards, that there are questions that are raised sometimes regarding the fitness of a person who is an employee of a school system, not in regard to mental acumen but in regard to physical ability and there are questions asked about this on the physical examination. On the one hand, it may be coercing the teacher into taking the physical exam, on the other hand it may be the responsibility of the medical profession as a matter of public interest to see that, at least, reasonably fit, physically and mentally, people are certified teachers.

Because of these points, I have some reservations and I intend to vote against the motion at this time. I don't think we have all the facts before us to tell us why this trip is necessary.

SPEAKER DAVIS: Are you speaking against adoption of the resolution itself then?

DR. BEDDINGFIELD: At this time, yes.

SPEAKER DAVIS: Does anybody else wish to speak at this time on this motion?

DR. DAVID S. CITRON [Mecklenburg County]: I'd like to speak in favor of this motion. I think we all recognize that there is a manpower shortage. I think it behooves us to look to ways in which we can utilize our time more effectively. I think the optimal frequency of physical examinations will vary with the particular patient population, age and so on and I think this is a judgment which should be made by one's personal physician and not by some national educational body, or by legislative fiat.

I think that probably the initial purpose of this law was two fold, first to prevent the spread of communicable disease in classrooms and second, to determine a person's physical fitness to be a teacher.

Now, as far as communicable disease spread is concerned, there are many other individuals who have closer contact with children than do teachers and no physical examinations are required of them.

I refer to dentists, nurses and even the physician who has no such requirement. As far as one's fitness to practice is

concerned, I think this is determined best by one's peers, just as the fitness to practice medicine should be determined by one's peers.

We also have teachers who have multiple sclerosis, and other disabling diseases but are still effective in the classroom, and that's why I'm in favor of this resolution.

SPEAKER DAVIS: Thank you, Dr. Citron.

Is there further discussion of Resolution No. 7?

[No response]

If not, those favoring adoption, please say "aye"; those opposed "no." It appears that the "ayes" have it. Resolution No. 7 is adopted.

RESOLUTION NO 8

DR. CLEEK: Resolution No. 8, Subject: Supporting the Labeling of All Prescription Medications with Legislation to Implement this into Law.

Four doctors were present and all four spoke for this resolution. No opposition was heard. Since this does provide for better indication of medication in the emergency room and thereby avoidance of an overdose, this is in the interest of better medical care.

The committee recommends adoption of this resolution and I so move.

SPEAKER DAVIS: Resolution No. 8 is before you with the recommendation for its adoption.

Is there discussion?

If not, those favoring adoption of Resolution No. 8, please say "aye"; those opposed "no." It is adopted.

RESOLUTION NO. 10

DR. CLEEK: Resolution No. 10, Subject: Representation on Health Planning Councils.

Six people spoke in discussion of Resolution No. 10. Four were for it, one was questionable, however he did not speak against it.

This particular resolution comes from Guilford County who have had a little bit of a problem with health planning councils due to non-physician representation.

The committee recommends adoption of this resolution and I so move.

SPEAKER DAVIS: Resolution No. 10 is before you with a recommendation for its adoption. Is there discussion?

[No response]

If not, those favoring adoption of Resolution No. 10 please say "aye"; opposed "no." It is adopted.

RESOLUTION NO. 11

DR. CLEEK: Resolution 11, Subject: Resolution for Improvement of Relations between the Board of Medical Examiners and the Physicians in the State of North Carolina.

There were seven discussants at the hearing, three were against, four were for it.

The committee recommends adoption of this resolution and I so move.

SPEAKER DAVIS: Resolution No. 11 is before you with the recommendation for its adoption. Is there discussion?

[No response]

If not, those favoring adoption of Resolution No. 11, please say "aye"; those opposed "no." Resolution No. 11 is adopted.

May I have a motion that the report, the entire report of Reference Committee I be accepted?

[The motion was made and seconded from the floor.]

It has been moved and seconded. Is there discussion?

Those favoring acceptance of report of Reference Com-

mittee I, as amended, please say "aye"; those opposed say "no."

It is accepted as amended, with our sincere thanks to Dr. Thornton Cleek, as Chairman of this Reference Committee, Dr. Henry Nicholson and Dr. Joseph Baggett, who are the other members of this group. We are indebted to you for an outstanding job.

Thank you.

VICE SPEAKER CARR: We will next have the report of Reference Committee II, Dr. Warren, will you take the podium please? Dr. Ashe will please come to the front.

I believe the Chair is correct in stating that the other members of this committee was called home due to illness of a child and these two gentlemen represent us.

REFERENCE COMMITTEE II

DR. WARREN: Reference Committee II submits to the House of Delegates the following report.

REPORT B

Report "B," Subject: Society policy favoring pluralistic system of health care.

There were no questions. No one spoke for or against. Some clarifying questions were asked and answered.

The committee recommends adoption of this report and I so move.

VICE SPEAKER CARR: You have heard the report, moving to adopt Report "B." Is there any discussion?

[No response]

If not, those in favor of adoption of the report will please say "aye"; opposed "no." The report is adopted.

REPORT F

DR. WARREN: Report "F," Subject: Statement of Policy on Drug Abuse and Drug Dependency.

Several spoke for this. None spoke against it.

The committee recommends adoption of this report and I so move.

VICE SPEAKER CARR: Report "F" is before you for adoption. Is there any discussion of Report "F" or any clarifying questions or inquiries?

[No response]

If not, I'll call for a vote on adoption of Report "F." Those favoring adoption of Report "F" will please say "aye"; opposed "no." The report is adopted.

REPORT G

DR. WARREN: Report "G", Subject: Rubella Immunization.

It was felt by the committee after discussions by approximately eight individuals that some changes needed to be made and they are now included in the second sentence so the amended report is as follows:

All women in the child-bearing age should be rubella hemagglutination inhibiting antibody tested either through premarital or prenatal programming. If negative and not pregnant she should be immunized with counselling about the needs to prevent pregnancy for at least three months; if pregnant, she should be immunized immediately postpartum.

The committee recommends adoption of this amended report and I so move.

VICE SPEAKER CARR: The amended report is now before you. Is there any discussion?

[No response]

Hearing no discussion, I now call for the vote on the re-

port as amended. Those in favor of adoption of this amended report please "aye"; any opposed? The amended report is adopted in lieu of the report as presented.

RESOLUTION NO. 1

DR. WARREN: Resolution No. 1, Subject: Resolution Against the Use of Amphetamines and Methamphetamines.

There was considerable discussion of this. Some felt that other drugs such as retamine should be included, but the committee felt that the resolution should be directed specifically against the dependency on drugs which is the biggest current problem so that the committee amended the resolution and the amended resolve is as follows:

RESOLVED, that the members of the North Carolina Medical Society use no amphetamines or methamphetamines for appetite control and that the use of these drugs be restricted to the treatment of narcolepsy, hyperkineic children and other disorders which in the opinion of the patient's physician will be beneficial, and be it, further,

RESOLVED, that each county medical society be encouraged to pass a similar resolution.

This second resolve is put in here with the hope that each local medical society will give it a little more attention, and bring it to the attention of local physicians.

The committee recommends adoption of the amended resolution and I so move.

VICE SPEAKER CARR: The amended resolution is before you for discussion.

Dr. Johnson at microphone two.

DR. JOHNSON: I wonder, Dr. Warren, as Chairman of your Reference Committee, whether you would accept one very small change in the first resolve, "that the members of the North Carolina Medical Society use no amphetamines or methamphetamines . . ." and change "use" to "prescribe." I believe if you read that carefully, you will agree!

DR. WARREN: We will accept the change. We should have paid attention to the verbs as well as the nouns!

VICE SPEAKER CARR: Dr. Warren and his committee has accepted the change, I believe.

Dr. Bigham!

DR. ROY S. BIGHAM, JR.: Mr. Speaker, from the standpoint of good English, would you accept one small grammatical change, in the last line of the first resolve, ". . . that the use of these drugs be restricted . . . which in the opinion of the patient's physicians will be beneficial . . ." to ". . . which in the opinion of the patient's physician their use will be beneficial. . . ."

VICE SPEAKER CARR: Dr. Warren, will you accept that small grammatical change to add the word in the last sentence there?

DR. WARREN: I will accept your change, Dr. Bigham. [Laughter]

VICE SPEAKER CARR: The Chairman of Reference Committee II accepts a change in the wording and the Chair will rule that it's not necessary to amend by motion since it has been accepted by the committee.

Any further discussion on this resolution? [No response] Hearing none, I will call for a vote on Resolution No. 1. All those in favor say "aye"; opposed "no."

The "ayes" have it and the resolution is adopted.

SPEAKER DAVIS: Gentlemen, I ask your indulgence to interrupt our proceedings because of the special honor paid this House of Delegates; that is, a visit to this chamber by the President of the Auxiliary of the American

Medical Association and I will ask her to please come forth and speak to us.

I give you Mrs. Patty Lee of Portland, Oregon!

[Whereupon as Mrs. Lee came forward to the podium, she was accorded a standing ovation.]

MRS. PRENTISS (Patty) LEE [President, Auxiliary to the American Medical Association]: Thank you, very much.

Dr. Davis and Members of the House of the North Carolina Medical Society:

I am certainly delighted to be in your beautiful State. This is my first visit to North Carolina and it is certainly a privilege to be here.

I have been having a beautiful ego trip and I am enjoying it; I love it!

In bringing you greetings today, I am reminded of a story of "Blessed be the brief, for they shall be invited back"! [Laughter]

You know, the *Ladies' Home Journal* used to have a slogan, "Never underestimate the power of a woman" and I might say to you that your doctors' wives are a source of potential power. They are women who are well received, most of them are intelligent—[laughter]—and they are all articulate. They want to do something worthwhile with their talent, time and energy, and they want to help you because they love you.

But, they need direction from you.

You know, the great Wendell Oliver Holmes the physician-poet once wrote, "The great thing is not so much where we stand, but in which direction we are moving," and to reach the point of heaven we must sail sometimes with the wind and sometimes against it, but we must sail and not drift or lie in anger, and the Auxiliary has truly become a constructive and forward-looking organization.

We are responsive to the health needs of our nation and are looking for ways to relate ourselves to solutions and as I travel throughout the country, I am tremendously impressed with the volunteer efforts of these women and your wives in North Carolina are no exception.

The reports that they gave yesterday were absolutely impressive and you can be justifiably proud of these great women.

I really believe that doctors and their wives are great people. You're great because of the way you develop greatness by the way you live and do things and you incorporate into your characters the elements from which greatness evolves—humility, a sense of justice, an awareness of the needs and aspiration of others, a persistence of unadvertised sense of responsibility to join in service.

But, gentlemen, we must work together, the medical societies and the auxiliaries, to help generate faith and pride for the proud possession of medicine and for those who practice the art of science today.

The saying of the ancient scholar is especially appropriate:

If I am not for myself, he shall be for me;

Yet if I am for myself only, what am I and if not now, when?

[Applause]

SPEAKER DAVIS: Mrs. Lee, we do appreciate your being with us and you have a standing invitation to come back, not only because you've been brief, but because you brought us a real message.

Thank you, so much.

[Applause]

VICE SPEAKER CARR: Now, to reconvene the ses-

sion. Dr. Warren, if you will come to the podium again and proceed with your report.

RESOLUTION NO. 3

DR. WARREN: Resolution No. 3, Subject: North Carolina General Statutes Concerning Abortion.

A whole bag of doctors discussed this and after much consideration, the Reference Committee II presents the following amended resolution:

RESOLVED, that the North Carolina Medical Society go on record as considering an abortion to be an elective surgical procedure which should only be performed by a licensed physician; and, further, that the decision to perform an abortion should be made by the woman and her physician; recognizing that the physician has the responsibility in each instance to make sure that his patient has fully considered the alternatives to terminating her pregnancy and is not being coerced into seeking an abortion. Furthermore, any physician whose personal beliefs are in conflict with the surgical interruption of a pregnancy should under no circumstances be required to perform an abortion, and, be it further,

RESOLVED, that the Medical Society approves the passage of a bill concerning the interruption of pregnancy which incorporates the following provisions:

An abortion shall not be unlawful if it is performed before the twentieth week of gestation by a physician licensed to practice medicine in North Carolina upon the written request of the pregnant woman; and if it is performed in a hospital licensed by the North Carolina Medical Care Commission. An abortion shall not be unlawful after the twentieth week of gestation if two physicians certify that the health of the woman is in substantial danger from the pregnancy or that there is a clear risk that the child may be born with a serious physical or mental defect, and be it further,

RESOLVED, that the Medical Society condemns the operation of profit-making abortion referral agencies and will do all that it can to see that no such agencies are established in North Carolina.

The committee recommends adoption of the amended resolution and I so move.

VICE SPEAKER CARR: You have heard the amended resolution as presented by Dr. Warren, speaking for the Reference Committee.

Is there any discussion of this amended resolution?

Microphone number one!

DR. JOSEPH M. WARD [Pitt County]: I'm Ward from Pitt County!

In my opinion, the present North Carolina abortion laws are adequate for the needs of the people of this State. I feel that this resolution deals with questions involving serious moral issues; therefore, I recommend that this resolution be rejected.

Dr. Jack Wilkerson of our Pitt County delegation also concurs with this.

VICE SPEAKER CARR: Is there further discussion?

Dr. Pierce, microphone number two!

DR. PHILIP PEARCE [Durham County]: I'm Pearce from Durham-Orange.

We are the body which recommended the resolution be brought in in the first place. Those of you who were here approximately two years ago, may remember I gave a similar plea at that time that we pass a resolution which, in essence, contains what this does but doesn't spell it out

and I would like to read that which the House of Delegates passed before.

Although presently regulated to some extent by laws, the Medical Society of the State of North Carolina believes that the initiation, continuation or interruption of pregnancy is the personal responsibility of each woman. Any problems arising out of pregnancy are a concern of the pregnant woman and her chosen medical doctor.

Those of you who were at the Reference Committee yesterday heard approximately an hour of all the pros and cons on this and I will not go into repeating this.

I believe the majority of people who are interested were there. I will say this has a deep moral feeling for many people, as the previous speaker had as it does for me and I think the Society has no place in dictating what his morals or mine should be.

I think this is a medical matter and I would recommend that it be settled in that manner.

VICE SPEAKER CARR: Dr. Pearce, to clarify, the Chair would like to ask are you speaking for the amended resolution?

DR. PEARCE: I am speaking for the amended resolution.

VICE SPEAKER CARR: Thank you.

Is there further discussion of this amended resolution? Microphone one!

DR. CLARKE: Clarke from Catawba!

It seems to me that what we have on the books is sufficient. I am not in favor of this or the other one, but we already have permission on the books. This Society has endorsed it.

This looks like an attempt to try to save conscience. If you are going to allow abortions, it looks like it doesn't matter whether it's done by professional people in one of these abortion mills or not.

I am not in favor of this, either and I'm thinking this is an attempt to save conscience rather than being constructive. We already have enough on the books.

VICE SPEAKER CARR: Is there further discussion?

Microphone two!

DR. ALAN R. BROWN [Haywood County]: Brown of Haywood!

I would like to bring out one point.

I was not able to attend the meeting yesterday, but it seems to me the rights of the father seem to have been completely neglected. I read nothing in here regarding the rights of the father. I happen to be a father and I believe in the rights of the woman and a lot of other things, but I do not believe we should entirely ignore the rights of the father.

[Applause]

VICE SPEAKER CARR: Microphone three!

DR. J. R. ASHE, JR. [Cabarrus County]: Ashe from Cabarrus!

I bring a report from the Chairman of the Section on Gynecology on Resolution No. 3 which was discussed at our meeting this morning and it was endorsed, in toto, with no dissenting votes.

I might also say this is a problem which belongs to the practice of obstetrics and gynecology and we felt some weight should be brought from our Section.

VICE SPEAKER CARR: The Chair recognizes the delegate at microphone number one.

MR. WOODRUFF [Student Bowman-Gray School of Medicine]:

I would like to speak in favor of the amended resolution three for the following reasons.

It removes barriers which now exist which prevents this care from being available to patients who are not in this service. Therefore, this proposal frees a physician and a patient as they deem necessary under individual circumstances.

It removes the unnecessary procedure of obtaining consultants. These consultations tie up manpower which could be more effectively utilized and they are costly to the patient.

It places the responsibility for counselling on the doctor performing the therapeutic abortion as it should be. This is the person most likely to provide this type of counselling for these patients.

It will help avoid discrimination against the medically poor and indigent. The position of Bowman-Gray School of Medicine which is advisory on this matter, is that it should be set up akin to the situation in New York State which is a proposal to limit abortions to licensed hospitals.

We feel this measure will prevent the reflux type of situation of North Carolina people going to New York, would allow North Carolina physicians to take better care of their North Carolina patients.

This State should be proud of its care in this area. I think the resolution would provide this necessary service. Thank you.

DR. ROBERT YOWELL [Durham-Orange County]: Dr. Pearce has voted essentially on this matter before for us and at this time I would merely say that this I think this is definitely a medical problem and should be a matter between patient and doctor.

DR. BEDDINGFIELD: I simply want to ask a point of information.

I ask this of the sponsors of the resolution and perhaps also the Reference Committee. Although there was some laughter awhile ago about the rights of the father, this did become a question in the last legislative debate in the General Assembly and the Medical Society was asked this question and my question to the sponsors of the resolution is, was this matter considered, particularly in the matter of the written consent?

If it is advisable and I'm not suggesting that it is or it is not, but I'm just directing the question towards the sponsors if they feel it is advisable because this apparently was important to the members of the General Assembly.

This could be altered by saying that in the fourth line of the amended resolution, to add these words following "upon the written request":

... and if married and living with her husband, the consent of the husband.

I would ask if this was considered and if not, could we clarify it so that the legislative committee might show the will of the House of Delegates to the General Assembly?

VICE SPEAKER CARR: Dr. Warren, do you wish to answer that from the Reference Committee, first?

DR. WARREN: This was discussed in the Reference Committee.

It was felt that this was taken care of that no additional wording would be necessary in the resolution since it was worded in part:

... recognizing that the physician has the responsibility in each instance to make sure that his patient has fully considered the alternatives. . . .

I don't think there's any physician in the State that would be foolish enough to do an abortion on a married woman

without getting the okay of the husband, at the same time.

DR. JOE W. BAGGETT [Cumberland County]: I would like to speak against this amended resolution.

I am an obstetrician-gynecologist. I have done a lot of abortions because of the law in this area, which was historically changed in '67 and again in '69 and I think it's a little inappropriate to ask the legislature to go through this thing again with the law being changed at every session of the legislature.

The timing, I think, is a little bit early to have another change following a lot of ventilation of it throughout the State and I feel it's in the best interest of the law and the patient in the practice we now have which is working very satisfactory that it continue as it is.

VICE SPEAKER CARR: Mr. Schwartz, did you wish to speak as the delegate from the Duke SAMA?

MR. MARTIN SCHWARTZ: [Student, Duke University School of Medicine]: We must face the fact that this issue will be before the next session of the General Assembly whether it's introduced by physicians or not, for it will be brought up by Art Jones of the Society for the Repeal of North Carolina Abortion Laws.

It is very important that the legislature have something to pinpoint, that the Medical Society supports a good working abortion law.

I fully support the amendments to the resolution which we introduced from Durham and Orange counties. I think they strengthen the model law which we have proposed and when this does come into the system, people can look and analyze the law as being one of the best laws there is. They would then write it.

I would add to the discussion of my obstetrical and gynecological colleagues, and say that from data from New York experience, in the first twelve weeks this is an extremely safe medical procedure.

The data from New York indicates out of 26,000 abortions there were no deaths, there were only 26 intrauterine perforations and one of these required a hysterectomy.

This is one of the best methods of practice in the world.

Now, in this State, unfortunately because of the present law, many women are coming in, something like forty per cent beyond the twelfth week of pregnancy and they are given a procedure that is not the common practice of vacuum curettage, but saline extraction.

In general, if a woman needs an abortion there is still no way in which she can be helped, particularly the very young and the very poor. We know that many physicians will help her and this resolution will go a long way to make sure that a woman can have an abortion when it is most safe to have an abortion.

VICE SPEAKER CARR: Is there further discussion?

DR. JESSE CALDWELL: Mr. Speaker, Ladies and Gentlemen:

I have been advised that I cannot speak for the unborn child because he is not a delegate.

We are not surprised that this matter has come before the House again after two years and one of the reasons why we are not surprised is because the personnel involved has been sending out letters.

Two years ago, we passed in fact a resolution which would permit destruction of the unborn child upon the request of the pregnant woman.

Now, more states that have considered this matter in this interim period have refused to liberalize their laws than have liberalized them.

The person who casts the deciding one vote in the State

of New York Legislature to permit them to destroy the unborn child lost in his re-election bid. A number of other legislature candidates in New York State ran a platform principally consisting of repealing their so-called abortion law and as you know, they gave a majority.

They knew before the legislature convened that they had enough votes to repeal the law.

Now, I think it was a few weeks ago the New York House and Senate voted to repeal their 1970 law on this matter. Prior to their vote, however, Nelson Rockefeller declared that he would veto any repeal legislation.

Now, the word that I have was that Rockefeller came under considerable pressure from New York City which is now enjoying a World's Fair-like economic boom and many of the distressed hospital, financially distressed, were finally in the black and everybody seemed to be happy.

In other words, people in New York City although it did not matter to them about destroying the unborn child did not wish to destroy the goose that laid the golden eggs.

Now, I ask you to vote against this resolution and before I close, I would like to read to you a short twelve line free verse poem from a recent issue of the *New England Journal of Medicine*. This is an unborn child speaking to its mother, shortly after she has paid her \$300 to the physician to destroy its life:

I am your child, within the silence of your womb I grow, an uninvited guest; is this my tomb? I bear your name, but without your genes I could not start to be;

By your imperative demand, must I now die before I see? You have your life and love, your time for laughter here on earth; would you deny to me my life and children of my own?

What am I worth? What am I worth?

VICE SPEAKER CARR: Is there further discussion on the amended resolution as presented?

MR. SCHWARTZ: I have great respect for Governor Rockefeller of New York. I think he has made a most courageous act.

I would like to read to you a paragraph from a letter he wrote on his veto of any repeal of the New York act.

I fully respect the moral convictions of both sides of this extremely sensitive controversy, but the extreme personal vilification, political authority and welfare of members of the legislature raise serious doubts that the votes to repeal and reform is the representative will of the majority of the people of New York State.

VICE SPEAKER CARR: Is there further discussion of this amended resolution?

[No response]

If not, the Chair will call for a vote on the resolution as amended.

All those in favor of adopting this amended resolution please say "aye"; opposed "no."

The Chair will rule that in his opinion the "ayes" have it and those speaking for it are in the majority and the resolution is adopted as amended.

(There was a request for a standing vote with the results of the tellers count announced as follows:)

DR. BIGHAM: Voting in favor of the amended resolution, 121; those against, 37.

VICE SPEAKER CARR: The Chair announces that the amended resolution passes. The amended resolution having been adopted, the original resolution does not come before the House.

RESOLUTION NO. 4

DR. WARREN: Resolution No. 4, I'm going to change two words in the resolve as you have it printed.

Subject: Information Packet to Members of the State Legislature.

RESOLVED, that the Medical Society recommends the collection for use, at the discretion of the State Legislative Committee, data on (1) the reliability and side effects of the current methods of contraception; (2) the experience of countries and states which have an abortion law similar to the one proposed in resolution number three; (3) the basic psychiatric and medical facts concerning abortion; (4) the basic psychiatric and medical facts concerning the battered child syndrome; and (5) other pertinent material as approved by the President of the North Carolina Medical Society.

The change is from "data" to "facts."

The committee recommends adoption of the amended resolution and I so move.

VICE SPEAKER CARR: Resolution No. 4 as amended is offered to you for your information.

Is there any discussion of this amended resolution number four?

[No response]

If there's no discussion, those in favor say "aye"; those opposed "no."

The "ayes" have it and the amended Resolution No. 4 is adopted.

RESOLUTION NO. 6

DR. WARREN: Resolution No. 6, Subject: Third Party Payor Payments to be Identical in Both Medical School Hospitals and Community Hospitals with Teaching Programs.

There was some discussion of this policy. I don't believe anybody spoke against it. Some clarification as to what a teaching program consisted of and that was determined to be a teaching program which involved internship and residency programs only and not the training of medical students only.

The committee recommends adoption of this resolution and I so move.

VICE SPEAKER CARR: You have heard the resolution and the report of the committee on the resolution. Is there any further discussion?

[No response]

Those in favor of adoption of the resolution, please say "aye"—Dr. Lymberis, microphone two!

DR. MARVIN LYMBERIS: Just a point of clarification. As this reads here, payment to hospitals and the purpose of this resolution did not concern payment to hospitals but payment of physicians' services.

DR. DAVIS: Mr. Speaker, yes, Dr. Lymberis is right. This does not assume that payment will go to the hospital but it will go to the teaching program itself or the foundation which this teaching program finds desirable to establish.

These funds are not used for the general fund nor do they revert to private physicians participating but they are used for the enrichment of the teaching program concerned.

VICE SPEAKER CARR: Isn't institution the word?

Dr. Warren, would that make it clear with the additional wording?

DR. WARREN: I think it's pretty clearly understood. The terms of this will have to be worked out between the hospitals involved and the insurance program and no further insertion of words will make any difference.

It just gives the blessing of the Medical Society to make the payment to third party payors identical.

VICE SPEAKER CARR: Any further discussion of the report of the committee?

[No response]

If not, we will vote on the resolution, and the report of the committee which is for the adoption of the resolution.

All those in favor of adoption please say "aye"; opposed "no."

[There were several dissenting votes.]

The Chair will rule that the "ayes" have it and the resolution is adopted.

RESOLUTION NO. 9

DR. WARREN: Resolution No. 9, Subject: Reaffirmation of Concerns of Colorado Medical Society for the American Medical Association.

Dr. John Gamble of Lincoln County discussed this resolution which was entered by his county medical society. Dr. Dave Welton spoke against the resolution stating that most of these objections were trying to be met by the American Medical Association. He cited the information poll which many of us got and responded to it. He stated that mechanisms for change are available.

It was agreed that item seven was not appropriate to the main body of the resolution, on number two that substantial numbers of minority reports do not get received and he stated that they realized that minority reports frequently received attention and are frequently passed by the House of Delegates of the AMA.

After discussion, the committee recommends rejection of this resolution and I so move.

VICE SPEAKER CARR: You have heard the report of the committee recommending rejection of this resolution. We are voting on the resolution.

Those in favor of the adoption of the resolution please say—excuse me, I should call for discussion.

The floor is open for discussion on the resolution.

Dr. Gamble, microphone number four!

DR. JOHN GAMBLE [Lincoln County]: John Gamble, Lincoln County!

Mr. Speaker, this resolution was presented in the spirit of constructive criticism and unfortunately I gathered from some of our discussion, it wasn't received fully that way and I would like to clarify that.

I would like to say the content of the resolve was for this public forum that was held at the request of the Society of Colorado, that they asked that this open forum be held for this purpose and their concern for the AMA and its role and that the action as taken although it may have represented one hundred or less members of the State Society who chose to appear in the open forum, it didn't particularly mean that this was a congress of dissidents and misfits. These were all recognized members of the Society and in turn I don't feel that it represents a frivolous decision or action by them, although this was a small group who registered their concern about the AMA.

DR. W. WYAN WASHBURN [Cleveland County]: I would like to speak in support of this resolution.

I was once a member of one of the major councils of the AMA and worked with them a good while and I think we ought to remind them once in a while that we're still back here, that we're still doing the work, that they represent us and do it gently, do it affirmatively, and do it respectfully because I think the AMA ought to know this.

I think one of the big criticisms of the lay press, of the

lay doctor, is that they do what they want to do and they let us go hang.

Now, I believe this is not all together true because I worked for ten years on a council, but I got a lot of criticism one way or the other for not having the proper communication. Maybe this is a little obtuse in presenting it this way, but apparently Colorado has done a good job in thinking the same thing.

I would think we ought to pass this resolution and then lovingly and respectfully let the AMA know that we're still here.

Thank you.

VICE SPEAKER CARR: Is there further discussion of this resolution?

Microphone number two!

DR. DAVID WELTON [Mecklenburg County]: Welton from Mecklenburg!

Mr. Speaker, I don't wish to take the time of this House to repeat my discussion rendered to the Reference Committee, part of which was given to you by Dr. Warren.

Let me put it this way.

It appears to me that this resolution is asking your delegates to the AMA to present on the floor of the AMA a statement from North Carolina which infers that certain steps are not being done which are in fact being done and which, therefore, appears to be factually incorrect.

Thank you, Mr. Speaker.

VICE SPEAKER CARR: Is there further discussion of this resolution?

[No response]

If not, we'll call for a vote on the resolution.

Those in favor of passage of the resolution will please say "aye"; those in favor of rejecting the resolution please say "no."

It's my opinion the "noes" have it. Is there a wish to have the House divided?

[There was a call for division of the House from the floor.]

There is a call for division of the House and I will ask Dr. Bigham and his committee of tellers to begin their function.

Those in favor of the resolution will please stand.

[There followed a counting of the votes.]

VICE SPEAKER CARR: Those in favor of rejecting the resolution will please stand.

[There followed an overwhelming vote in the negative.]

The resolution is rejected.

REPORT L

DR. WARREN: We now go to Report "L." Subject: Problem of Insurance Industry Determination of Fees.

Nobody spoke against this report.

The committee recommends adoption of this report.

VICE SPEAKER CARR: The primary motion is on the floor. It was presented on Sunday. It has been seconded. It is the property of the House. The committee recommends adoption.

It is now open for discussion and I will now recognize Dr. Beddingfield.

DR. BEDDINGFIELD: Mr. Speaker, I am fully in sympathy with the intent of this Statement of Policy. I think there is some danger in item one and I would offer an amendment to item one as it appears in Report "L."

It now reads:

It shall be the policy of the Medical Society of the

State of North Carolina to advise its members to reject any determination of professional fees by a third party.

I would offer by amendment to delete the period following "third party" and insert in lieu thereof a comma and these words: "unless such determination is in accord with the conclusions of a peer review committee appointed by the Medical Society."

Now, my reasons for offering this amendment are these, several years ago the House went on record as favoring a method of third party reimbursement shall be customary and reasonable.

Now, that phrase has been distorted, emasculated if you will.

But I think we can cover this now with usual, customary and reasonable as determined by peers. Now, either directly or indirectly, as members of the AMA, we support the concept of peer review and we accept peer determination when we accept our fee.

If we do not accept this, we may well by some third party program be locked into a rigid fee schedule.

If we take this action without the amendment that we would be in difficulty with our ongoing efforts in peer review.

Now, I do not speak in favor at all for all types of peer review that the Aetna Life Company suggested in its communications that we have all read. They said they would sweep all claims in questions to review by the company, and the physician should have the right to scrutiny by his peers and this Society should advise its members to accept a fee as determined by true peer review and this amendment would accomplish that.

VICE SPEAKER CARR: Dr. Beddingfield, before you leave the microphone, so it will be clear, do you have the numbered lines?

DR. BEDDINGFIELD: Beginning on line 49, to delete the period after "third party," insert a comma and add the following words:

Unless such determination is in accord with the conclusions of a peer review committee appointed by the Medical Society.

VICE SPEAKER CARR: This is offered as an amendment by the addition of words.

DR. JACK HUGHES [Durham County]: Second.

VICE SPEAKER CARR: The amendment has been seconded. Discussion.

DR. KOONCE: Donald Koonce from New Hanover County.

I would like to speak very violently against this amendment. I think it dilutes it and I think it should be just as strong as possible.

VICE SPEAKER CARR: Dr. Styron, as a member of the House of Delegates has the floor.

DR. STYRON: I would agree with Dr. Warren that the item four fully explains the alternatives in case of disagreement.

It's perfectly possible that adding such an amendment to item number one that the physician and the insurance company may agree entirely on the actual fee, but it gives the opportunity where there is agreement for the insurance company to make this determination and we recognize that ninety-five per cent of the physicians, perhaps more, will agree in general with such determinations as the third party makes.

We recognize that. What we want to avoid is the possibility of their making this determination under any circumstances and I would agree with Dr. Koonce on this

matter and I would speak against the amendment to item one.

VICE SPEAKER CARR: Is there further discussion of the amendment as presented by Dr. Beddingfield?

[No response]

If not, we will vote on the amendment.

All those in favor of the amendment will please say "aye"; those opposed "no."

The "noes" have it, the amendment is defeated.

The report is open for further discussion.

DR. ALBERT L. CHASSON [Wake County]: Does the State Medical Society have the legal rights to do this? I wonder if we can get a legal opinion on this or is this a restrained phrase?

VICE SPEAKER CARR: Dr. Warren, Dr. Styron has requested permission to speak to this.

DR. STYRON: This matter has been discussed at length by the attorney, John Anderson, and although this is not a part of this resolution nor did we intend to make it a part of this, there is considerable information that this movement on the part of the insurance carrier to come to the aid of the patient in the event of disagreement in court may in itself be illegal, but we are quite within our rights with the statement as it's given here.

VICE SPEAKER CARR: Is there further discussion of the report?

[No response]

If not, we'll vote on Report "L." All those in favor of adopting the report will please say "aye"; those opposed "no."

The "ayes" have it and the report is adopted.

REPORT M

DR. WARREN: Report "M." Subject: Medicaid Requirements Regarding Agreement, Acknowledgment or Certification by Doctors and Other Providers of Service.

This report was presented by the Executive Council as information to the House of Delegates and the committee recommends acceptance of this report.

VICE SPEAKER CARR: You have heard the report of the Reference Committee recommending acceptance of the Report "M."

Is there any discussion of Report "M"?

[No response]

I see no one rising. I'll call for a vote.

Those in favor of accepting Report "M" as information will please say "aye"; opposed "no."

The "ayes" have it and Report "M" is accepted.

REPORT N

DR. WARREN: Report "N" is a resolution to the American Medical Association encouraging the use of every available communications technique to disseminate topical and accurate information to the physicians and to the public.

This was discussed by Dr. Welton favorably and he requested that the last resolve he dropped from the resolution as being a little abrasive to the California delegation and the committee recommends adoption of this report with the deletion of the last resolve.

VICE SPEAKER CARR: As the Chair understands it, the second resolve—that this be amended by dropping that second resolve.

DR. WARREN: That was the recommendation of the Reference Committee.

VICE SPEAKER CARR: We would ask you to make that as an amended resolution then please.

DR. WARREN: We make the amended resolution to read as follows:

RESOLVED, that the American Medical Association be encouraged to use every available communication technique to disseminate topical and accurate information to physicians and the public.

VICE SPEAKER CARR: You have heard the amended resolution. It has been moved and seconded. It is now open for discussion?

[No response]

Is there any further discussion of the amended resolution?

[No response]

If not, I'll call for a vote. All those in favor say "aye"; opposed "no."

The "ayes" have it and the resolution is adopted.

I will now entertain a motion to accept the report as amended, the entire report of Reference Committee II.

[The motion was made and seconded from the floor.]

Any discussion?

[No response]

If not, all those in favor say "aye"; opposed "no."

[The motion carried.]

REFERENCE COMMITTEE III

SPEAKER DAVIS: We move now to receive report of Reference Committee III. I would ask the members of this committee, Dr. Koonce and Dr. Beddingfield, to come forward and Dr. Shaffner to assume the podium below.

DR. SHAFFNER: Mr. Speaker, Reference Committee III submits to the House of Delegates the following report.

The committee held open hearings for three hours. Attendance was small, but the discussion was spirited and informed. Our report and recommendations are as follows:

REPORT E

Report "E," Subject: Proposed changes in the Constitution and By-Laws.

In view of the fact that a grammatical revision of the Constitution and By-Laws has been adopted at this session of the House and in order to avoid any ambiguity, identification of proposed changes will be made by reference not only to the old printed (1969) copy of the document but also where appropriate to the corresponding new grammatical (1972) copy.

A. Amendments to the Constitution:

Item 1: Life Members:

The First sentence of Article IV, Section 6, (new Section 3) now reads: "Life members shall consist of those physicians who have been members of the Society consecutively for twenty years and have attained the age of seventy years."

The proposal is to amend this first sentence to read:

Life members shall consist of those members of the Society who shall have retired from the active practice of medicine on or after the age of 65 and who shall have been dues paying members for 30 years, or who upon reaching the age of 70 shall have been dues paying members for 20 years.

Your Reference Committee noted the trend of physicians to retire from active practice at earlier ages than heretofore and agreed that those physicians who had been faithful members up to age 65, should be eligible for life membership.

The possible loss of dues from such retiring members is not anticipated to be significant. The definition of "retirement from active practice" might be a matter of degree, but the Executive Council can set guidelines for the head-

quarters staff and in special situations can decide the eligibility of a member for life membership. To attempt to cover all contingencies in one amendment would be impractical. It would seem to be incumbent also upon any member wishing to transfer from Active to Life Membership to notify the headquarters office of his retirement from active practice.

The committee recommends adoption of this amendment.

SPEAKER DAVIS: You have heard the recommendation from the committee. This is a proposed amendment to our Constitution and as you recall it must lie upon the table for a year, provided that it is accepted for consideration by a majority vote at the previous annual meeting which means it can come back next year if you accept it now, on a majority vote. It will then require a two-thirds vote as we experienced on Sunday.

So this proposed Constitutional amendment is before you for acceptance, with the recommendation from Reference Committee III that it be accepted. Is there discussion?

[No response]

If not, those favoring acceptance of this proposed amendment please say "aye"; opposed "no." It is accepted.

DR. SHAFFNER: Item 2: General Sessions:

Article VII, Section 1 now reads:

The Society shall hold annual meetings, during which there shall be held daily not fewer than one general session, open to all registered members and to other members as provided under Article IV above.

The proposed change would not require a daily general session, but only that at least two general sessions be held during the annual meeting.

Amend this section to read:

The Society shall hold an annual meeting, during which there shall be held at least two general sessions, which shall be open to all registered members and to other members as provided under Article IV above.

The committee recommends adoption of this amendment.

SPEAKER DAVIS: The amendment concerning general sessions is before you with the recommendation of the committee for its acceptance. Is there any discussion?

[No response]

If not, those favoring acceptance, please say "aye"; opposed "no." It is accepted.

DR. SHAFFNER: Item 3: Delegate from each Specialty Section:

The ad hoc Committee on Specialty Sections proposes that the House of Delegates allow one delegate from each specialty section to be a member of the House of Delegates each year. This can be accomplished by adding a phrase to Article V—House of Delegates, so that it will read as follows:

The House of Delegates shall be the legislative and business body of the Society and shall consist of (1) Delegates elected by the component county societies and delegates elected by the student members (2) ex officio the past Presidents and past Secretaries and the officers of the Society as defined in this Constitution and (3) Delegates elected by the Specialty Sections as provided for in Chapter XI, Section 1, of the By-Laws.

Your committee agrees with this recommendation, noting that its possible acceptance by the House has already generated interest in several sections as a mechanism by which a spokesman from a specialty group may have a voice on the floor of the House. Such renewed interest by our specialty members is not only desirable but will also make the deliberations of this House more representative of

the entire medical profession of the State in matters of common interest.

The committee recommends adoption of this amendment as modified.

I would mention that there is a change in the original Report "E," in the last sentence to the effect that instead of saying "... as listed in Chapter XI, Section 1, of the Bylaws," we have "... as provided for in Chapter XI ..." etcetera.

SPEAKER DAVIS: This proposed constitutional amendment is before you, its first reading, with the recommendation that it be accepted. Is there discussion?

[No response]

Those favoring acceptance, please say "aye"; those opposed "no." It is accepted.

DR. SHAFFNER: If the House approves this change, and it just did, the committee also recommends and herewith presents as a first reading, subject to review by the Committee on Constitution and Bylaws, the following change in the Bylaws to provide for the election of a delegate from a section:

Amend the third sentence of Chapter XI, Section 1, by inserting a comma in lieu of the word "and" after "Chairman-elect," inserting after the word "Secretary" a comma and the words "and a delegate and an alternate delegate," and adding to the end of the sentence the words, "except that the Student Member Section shall not elect any delegates." The sentence will then read:

During the meeting of each section, a Chairman, a Chairman-elect, a Secretary, and a delegate and an alternate delegate shall be elected for the following year either in open session or through a committee appointed for the purpose by the Chairman of the Section, except that the Student Member Section shall not elect any delegates.

This would be the first reading, Mr. Speaker, and would not require any action on the part of the House at this time. I will try to explain this if there are any questions.

SPEAKER DAVIS: Are there questions? If not, Dr. Shaffner, will you proceed?

DR. SHAFFNER: Further amendments to the Bylaws which can be acted on at this meeting.

Item 1: Nominating Committee:

This item proposes to change the term of office of the members of the Nominating Committee to three years. This requires changing two sentences in Chapter V, Section 2, which now read in the old copy, page 17:

No member of the Nominating Committee shall be eligible to succeed himself but one time, thereby limiting his eligible elections to two consecutive terms. He may however, be elected again to said committee after a lapse of one year out of office on the committee.

These two sentences in the new revision, page 15, begin:

A member of the Nominating Committee shall be eligible to succeed himself but once. . . .

The proposal is to amend Chapter V, Section 2, by substituting for the above two sentences the following:

Beginning with the 1974 annual meeting, election to the Nominating Committee will be for a term of three years. At the 1973 annual meeting, one member from each of the first, fourth and eighth districts will be elected for a full term of three years; one member from each of the second, sixth and tenth districts will be elected for a partial term of two years; and one member from each of the third, fifth, seventh and ninth districts will be elected for a partial term of one year. At each annual meeting

thereafter, members of the Nominating Committee will be elected to replace members from the same district whose terms expire that year. No member of the Society shall be elected to the Nominating Committee for more than one full three year term unless he shall have been off the Nominating Committee for at least three years.

The committee recommends adoption of this amendment.

SPEAKER DAVIS: This proposed amendment to our Bylaws is in order having laid upon the table for more than one day and the Reference Committee recommends its adoption. Is there discussion?

[No response]

If not, those favoring the adoption of this bylaw amendment, let it be known by saying "aye"; opposed "no."

The "ayes" have it and the amendment is adopted.

DR. SHAFFNER: Item 2: Establish a Section on Urology as recommended in Report 1.

The proposal is in two parts, one establishing a Section on Urology and the other providing for representation of the practice specialty of Urology on the Blue Shield Committee. For the sake of clarity the committee submits the following as substitute motions for the recommendations in Report "E":

(a) Amend Chapter XI, Section 1, on Sections by adding the word "Urology" after the word, "Dermatology."

(b) Amend Chapter X, Section 16, Blue Shield Committee by:

(1) adding to the end of the first sentence the words, "and Urology" so that the end of the sentence will read "orthopaedics, dermatology, public health and education, and urology," by

(2) adding on line 12, page 39 (new line 3, page 34) after the word "year" a new sentence reading: "The two members representing each of the designated practice specialties shall be from different medical districts," and by

(3) adding two additional sentences immediately after the above sentence (b) (2) to read:

"When representatives of any new practice specialty are added to the Committee on Blue Shield, at their first election one member representing that practice specialty shall be elected for a full term of three years and the other member shall be elected for a partial term of two years."

and,

"An additional practice specialty represented on this committee shall be urology."

The committee recommends adoption of these substitute motions, or motion, whichever you want to term it.

SPEAKER DAVIS: These are multiple amendments, but appears to the Chair that they are strongly related and hearing no objection, these will be considered together.

Is there objection to considering these together?

[No response]

If not, they are before you for adoption with the recommendation from the committee that they be adopted. Do I hear any discussion?

[No response]

If not, those favoring the adoption of these amendments please say "aye"; those opposed "no."

The "ayes" have it and the amendments are adopted.

DR. SHAFFNER: Item 3: Change Section name to Orthopaedics:

Amend Chapter XI, Section 1, by deleting the words "Traumatology and Orthopaedic Surgery" and inserting in lieu thereof the word "Orthopaedics."

The committee recommends adoption of this amendment.

SPEAKER DAVIS: This proposed amendment is before you. Is there discussion?

[No response]

Those favoring adoption of this amendment please say "aye"; opposed "no." It is adopted.

DR. SHAFFNER: Item 4: Assure that every delegate is a member of the Society:

Amend Chapter IV, Section 2, House of Delegates, by deleting the sentence "Every delegate shall be a voting member of the Society or hyphenated society which he represents," and inserting in lieu thereof this sentence:

Every delegate shall be a voting member of the Society and of a component society or hyphenated society or SAMA Chapter.

This proposal varies slightly from that in Report "E" in order to include delegates who may represent a Section as proposed previously.

The committee recommends adoption of this substitute amendment.

SPEAKER DAVIS: The substitute amendment is before you. The recommendation is for its adoption. Would anyone care to discuss it?

[No response]

If not, those favoring adoption, please say "aye"; opposed "no." It is adopted.

DR. SHAFFNER: Item 5: Organization of hyphenated society of New Hanover-Brunswick-Pender as recommended in Report "J."

Amend Chapter VII, Section 1 by rearranging the listing of the counties in the Third District to read:

Bladen, Columbus, Duplin, New Hanover-Brunswick-Pender, Onslow and Sampson.

The committee recommends adoption of this amendment.

SPEAKER DAVIS: This proposed amendment, is before you with the recommendation for adoption. Is there any discussion?

[No response]

Those favoring adoption, please say "aye"; opposed "no." It is adopted.

DR. SHAFFNER: Item 6: Provide for clerical help at Mediation Committee meetings:

Amend Chapter X, Section 9, subsection g, by changing the period at the end of sentence ending "proceedings" and substituting therefor a comma and the words "except upon the affirmative vote of the committee members present."

The sentence will then read (new copy, page 27):

When a complaint is being considered, unless in a given case the committee determines that verbatim testimony should be taken, no person other than committee members and the witness then being heard shall be admitted to any part of the proceedings, except upon the affirmative vote of the committee members present.

The committee recommends adoption of this substitute amendment.

SPEAKER DAVIS: This matter is before you for adoption. Any discussion?

[No response]

Those favoring adoption please say "aye"; opposed "no."

The "ayes" have it and it is adopted.

DR. SHAFFNER: Item 7: Change Section name to Family Physicians.

Amend Chapter XI, Section 1 by deleting the words "General Practice of Medicine" and inserting in lieu thereof the words, "Family Physicians."

The committee recommends adoption of this amendment.

SPEAKER DAVIS: Is there discussion of this proposed amendment?

[No response]

If not, those in favor please say "aye"; opposed "no." The amendment is adopted.

DR. SHAFFNER: Item 7(a): Amend all references in the Bylaws to "General Practice" by changing these words to "Family Physicians."

The committee recommends the approval of this amendment.

SPEAKER DAVIS: Any discussion on this proposed amendment?

[No response]

If not, those favoring adoption, please say "aye"; opposed "no." It is approved.

DR. SHAFFNER: Item 8: Change Committee name to Committee on Memorial Services:

Amend Chapter X, Section 2, by changing the words, "Committee on Necrology" to "Committee on Memorial Services," and amend Chapter X, Section 6, by changing the first four words which read "The Committee on Necrology" to the words, "The Committee on Memorial Services."

The committee recommends adoption of this amendment.

SPEAKER DAVIS: This proposed bylaw amendment with recommendation for its adoption. Any discussion?

[No response]

Those favoring adoption please say "aye"; those opposed "no." The amendment is adopted.

DR. SHAFFNER: That completes Report "E."

We now go to Report "O," Subject: Geographical Boundaries of Districts:

The House of Delegates last year by a close 66-to-63 vote directed the Council to submit a plan for the redrawing of district lines so that the number of physicians residing in each district be more equitable with those in other districts.

The Council considered eight different plans and has submitted one, "Exhibit A," to conform to the mandate of the House. In submitting this plan, however, the Council has recommended its rejection mainly on the ground that any such plan based on the number of physicians in a district would result in some districts with geographical areas too large for a Councilor to adequately serve.

The committee heard arguments that a plan has been devised that would not make maximum traveling distances in a district any larger than some now are and that neither the House nor the Council are at present as representative of the membership on a one-man-one-vote basis as could be arranged for either body.

The recommendation of the committee was, therefore, formulated after consideration of how important it is for effective and harmonious conduct of the business of the Society that efforts be made to have a more nearly one-man-one-vote representation on the Council.

It is the opinion of the committee that at the present time any advantage gained by further the one-man-one-vote principle will be offset by less statewide interests from all physicians, especially from the rural and less populated districts.

The committee, therefore, recommends that the redistricting as proposed in "Exhibit A" be rejected.

SPEAKER DAVIS: Actually, it is Report "O" that we are considering and you have a recommendation both from

the Executive Council and from the Reference Committee III that Report "O" be rejected.

Is there discussion of Report "O"?

Dr. Blair, microphone number three!

DR. G. WALKER BLAIR, JR. [Alamance County]: Walker Blair from Alamance!

I would like to speak in favor of accepting the proposal and against the recommendation of the Council.

I come from District 6 and would ask the various members to look at their map as I talk. In District 6, we have 891 members at the present time. Now, everyone has two maps. I want you to look at the map as presently drawn dated 12/1/71. In District 6 we have 891 members. I want to assure the members of District 1 that in comparing their district with ours, I'm not against someone from District 1 representing us on the Council as I have great respect and regard for every member. They have 61 members.

Now, so that we have a Councilor and credit as you may here one week of the year in the House of Delegates; the other 51 weeks of the year the Council acts for the membership.

When they talk about what the Councilor has to do as far as the whole district is concerned, we are not really talking about a great deal of the word of authority and I have been a member of Alamance County now for nineteen years and we have never had a Councilor visit us that I know anything about and the telephone is as near as your desk.

So for each member of the Society in the Sixth District, we have one-fifteenth—one-fifteenth representation on the Council from District 6 as in District 1.

Now, I'm not really up here wanting a one-man-one-vote rule that the supreme court does all over the country, but I do think there's a little something that's closer to fifteen-to-one.

This proposal brings it down to five-to-one and I'm perfectly willing to accept that, but fifteen-to-one does bother me a little bit.

I pay just as much dues as anyone else and I want to be a full member and not just a partial member.

As far as distance is concerned, this is just simply not true. If you look at your map dated 12/21/71 the smallest geographical district you can find in the state is one. If you look at the map under "Exhibit A," their proposed district for District 1 geographically is still not as large as the distance as great as District 10 up the Western end of the state and no one proposes a change in District 10 and yet District 10 is a large district but it has 340 members.

The average member, if you consider this the one-man-one-vote situation, each man would have 400.

I am perfectly willing to accept the proposal that is more acceptable to the Society, but I do think that in the district that I'm in it should be cut down from the approximately 900 we now have.

DR. WARREN: Dr. Blair has said that the 891 members of his district are represented by only one man on the Council.

I would represent to you, sir, that we are represented by three at the current time. We have Dr. Estes from Durham, and you have the President, Dr. Styron, and you have your Councilor, so actually your district has one-fourth of the representatives of the voting members of the Executive Council.

As the Council is now constituted, there are ten Councilors who are voting members and there are eight other members who are voting members. Six of the eight come

from medical societies with a membership of over 200 members and if these largely populated districts think that they're not being represented, they're just wrong. They are!

If the doctors ever decide to go from Gates County to Dare County, dodging the rivers and the swamps—we don't have the bridges or roads down in the Eastern part of the State and this is a bad place to travel and he would find that it was a very hard distance to travel.

The proposed revision of my district, District 2, would extend from Sea Level at the shores of the Atlantic Ocean to a point just south of Raleigh and that's a long way and it's much too much geography for one man to represent.

The members of the Council that I have observed over the two years that I have been serving on the Council, are not working for the districts, they are working for the State Medical Society. They try to carry out the wishes of the House of Delegates and try to anticipate what the House of Delegates wants so their actions during the year will be upheld by the House of Delegates.

I think that redistricting would work a definite hardship and is unfair and I speak against the adoption of the report.

DR. ERNEST W. LARKIN, JR. [Beaufort County] I think Beaufort County at one time was cut off the Northeast and let drift off to sea. If you cut us off much more, we might as well drift off by ourselves!

I think we all have the same objection to these geographical discrepancies, and having served on the Executive Council, I speak for the recommendations of the Council as stated.

DR. EDWARD BOND [Chowan County]: Bond from Chowan County! I speak as District Councilor and I might respond to Walker Blair in that the State Medical Society, we are all interested in representing the rural interests. We do have a lot of water down there, as Dr. Warren said, and we do have to go around a few corners.

I investigated one problem recently, it took the whole afternoon and I spent about three hours driving time. True, the problems are not many, but even the simple matter of making a telephone call, it has to be paid for.

I think if we need to enlarge the districts, we might split up some of the larger districts, but this has not been brought up.

But, I would be in favor of keeping the districts the way they are now, particularly in view of keeping harmony and trying to keep our rural physician interest in the State Society.

DR. FRANK R. REYNOLDS [New Hanover County]: I'd also like to speak against the redistricting and for the recommendation of the committee.

I think that the large counties that are doing just about everything that one could ask. However, sometimes out in the rural areas you find the district is more active which is true up in District 1.

It would be impossible under the redistricting plan for Districts 1 and 2 to act as districts. I think the present system that we have of the Councilors has been working very adequate and I think to say that the Councilor is not speaking for any particular part of the State, I think they think just like some of the other physicians; perhaps some of the rural physicians are more conservative than some of the urban physicians, but I would think it shows up a great deal.

I think we have a system that is working very adequately and I think we should keep it that way.

DR. LYNWOOD WILLIAMS [Lenoir County]: I served

as Councilor for the Second District for a number of years and I would like to go on record as opposing this redistricting. It's just not right to tear up down there and make distances greater because we have enough trouble getting together now.

The people where the big concentrations of populations are do not have the driving distances and have much better contact with one another.

I think you will be making a grave mistake.

I might point out that in reading the Constitution and Bylaws, it's customary and so states that the Councilor is the representative of the Medical Society to the district and although we choose him from the district, they stay officials to the district and we have the district as it is so organized.

And, I would like to make a plea for no change here because I don't feel that anybody on the Council, whether it's from rural, urban or whatever background, they represent what's good for the state and I would like to speak against adoption of the recommendation.

DR. BRUCE BLACKMON [Harnett County]: I would like to re-emphasize what the gentleman has just said in being opposed to any change today.

Looking way down the road and as a probable explanation of being opposed to this today, I would say that if we ever redistrict, we should give consideration to districting according to district lines that our Governor has set up.

We should keep this in mind since there will be these political subdivisions of our areas.

SPEAKER DAVIS: Is there any further discussion?

[No response]

If not, the issue before you is Report "O." It is a matter of record that the Executive Council and the Reference Committee recommend rejection. You will vote for or against the report.

Those favoring the report please say "aye"; opposed "no."

It appears that the "noes" have it and Report "O" is rejected.

DR. SHAFFNER: This ends the report of Reference Committee III.

SPEAKER DAVIS: Thank you, Dr. Shaffner. Dr. Beddingfield and Dr. Koonce for a very excellent job.

May I now have a motion that the report of Reference Committee III as amended be accepted.

DR. WARREN: I so move.

SPEAKER DAVIS: Is there a second?

[The motion was severally seconded from the floor.]

Those favoring acceptance please say "aye"; opposed "no."

The report is accepted.

REFERENCE COMMITTEE ON PRESIDENT'S ADDRESSES

We now turn to the Reference Committee on the President's Addresses and I'll call on Dr. J. Kempton Jones as Chairman of this committee.

DR. J. KEMPTON JONES [Chairman, Reference Committee IV]: Mr. Speaker! Our committee has reviewed the contents of President Charles Styron's addresses and find his comments very thoughtfully devoted to the welfare and progress of our Society.

Therefore, I move that the House of Delegates commend and endorse the President's addresses.

SPEAKER DAVIS: Thank you, Dr. Jones.

You have heard the motion from Reference Committee IV, if you will. Is there discussion?

[No response]

If not, those in favor please say "aye"; opposed "no."

This report is received.

We now move to old business. Is there such?

OLD BUSINESS

DR. GAMBLE: Mr. Speaker, last year I had the pleasure of presenting a resolution from my society that addressed itself to the need for new physicians in North Carolina.

This resolution in substance asked that a special committee be appointed to study the most expeditious and economical way to obtain new doctors, graduating doctors in North Carolina; to determine this maybe and to determine how many physicians North Carolina needed at this time to meet the crises and in personal conversations with Dr. Styron have indicated this study is well underway, but since this matter is so close to our hearts, I wanted to ask if we might take a moment to consider this if we could get an interim report on this as I think it would be well worthwhile hearing particularly with the forthcoming hearing of the North Carolina General Assembly and the place that such a study might take in helping that body determine its responsibility in enlarging the present medical schools and to encourage the private medical schools to meet the criteria in our state and I would like to ask for such a report if it could be had.

SPEAKER DAVIS: Thank you, Dr. Gamble.

I shall call on Dr. Glasson to give—

DR. JOHN GLASSON: I defer to Dr. Welton!

SPEAKER DAVIS: Dr. Welton, please, will respond to the question.

DR. WELTON: Following the resolution the House passed last year, Dr. Styron consulted me and asked me to consider this matter of an ad hoc committee to study this very important matter. We gave a great deal of thought to this.

We concluded the best group to do such a study is the Joint Conference Committee on Medical Care in North Carolina. This has been presented, of course, to the Executive Council. The Joint Conference Committee does include the Vice Chancellor for Health Affairs, it includes the five representatives from the State Medical Society, the Director of the Regional Medical Program, the Executive Secretary of the Medical Care Commission, the State Health Officers, the Executive Director of the Hospital Association and the President of the North Carolina Blue Cross Blue Shield.

So it appeared to us that this group was in a better position than any other group to cover the situation, gather the the information and try to make some determinations. It was in an effort to expedite this. This was also considered favorably.

I undertook to get the group to do this and they did so and they have been at work very diligently under the chairmanship of John Glasson, who will now give you some of his information on it.

DR. GLASSON: Members of the House of Delegates:

The information requested of this committee has been considered by a subcommittee, which I had the privilege of chairing.

This consisted of the Vice Chancellors of Health Affairs of the University of North Carolina, Bowman Gray and Duke, with information brought to the committee by the deans of the medical schools and more recently, by the

Vice Chancellor for Health Affairs of the East Carolina University.

The committee has met six times and has received invaluable aid from the North Carolina Regional Medical Program through the services of Robert Lindsey who has served as a recorder.

A large amount of information on this has been collected also through the help of Harvey Smith, Department of Health Science Research, University of North Carolina, who has done a lot of information gathering for the committee.

The committee is endeavoring to arrive at the needs for education of medical students in the State of North Carolina. It is attempting to see where North Carolina stands nationwide in the education of medical students. It is attempting to develop realistic estimates as to whether or not there are practical limits beyond which the expansion of existing schools cannot practically go and it is attempting to arrive at realistic, firm estimates as to the cost of new medical schools and a new teaching hospital and it is anticipated that the final report of this committee will be available within six months which should be available to us for input to the State Legislature.

We have word from reliable sources that the legislators are most anxious to receive the information from the Medical Society on these opinions.

I shall give some further information as to some of the information which we have gathered in my talk tomorrow, but will not indulge the House of Delegates at this time unless it's the wish of the House that I do so.

We have further information available and will have a complete report available probably within the next six months or so.

NEW BUSINESS

SPEAKER DAVIS: Is there further New or Old Business?

[No response]

If not, I would like to make a couple of announcements; one, that as I think many of you know one of our own members of this House, Dr. John Gamble, is assured of a seat in the General Assembly this fall and successfully campaigned in the primary and faced no opposition at the poll, and I would ask Dr. Gamble to please stand and receive our appreciation for his efforts.

[Whereupon Dr. John Gamble then stood up to be recognized.] [Applause]

DR. LINCOLN: Lincoln from Durham-Orange County!

Mr. Speaker, I don't know whether it is appropriate at this time to comment, but I would like to commend the student participation in the House of Delegates.

I must say I have listened to Mr. Schwartz for two days now and he has been well prepared, he had answers to most of the questions and I think this has been a real contribution to this House and I think they should be encouraged.

[Applause]

SPEAKER DAVIS: Thank you, very much.

The Chair and the Vice Speaker, I am sure, will agree in expressing our same sentiments about the fine action that you have given us today, the support, and we are particularly happy, as is Dr. Lincoln, that this is the first time we have had active participation by student representatives and we look forward to even greater participation by this group in the years to come.

The Chair now recognizes Dr. Glasson.

DR. GLASSON: Mr. Speaker, I'd like the privilege of the floor to bring information to the House which I just recently received.

We have learned that if we maintain our present format, that is the Saturday through Wednesday format for the annual meeting, it will be somewhat beyond five years before we can abide by the action that we have taken in changing the format.

If it is desired that we proceed with changing the format of this meeting, due to the exigencies of making reservations, it would be necessary to change our dates to June.

Now, this is brought to you in the event that you might wish to consider this and to balance the desirability of changing the format against the desirability of changing the May dates to June.

Mr. Hilliard may wish to enlarge upon this.

MR. HILLIARD: I have been in touch with the hotel in order that we may answer for you and possibly ask you to state your preferences as to when you would like for the meeting to be held in order to comply with the action to change the format from a Sunday through Wednesday meeting to a Friday through Sunday meeting.

The hotel can give us June dates; at least, they think they can give us June dates even as early as 1973. We do not have absolute confirmation, but the hotel thinks they can give us in 1973 a Friday, Saturday and a Sunday and they are open to investigation of Thursday, the sixth, seventh, a Friday, eight and the ninth of June, 1973.

Or, we can come in May with the dates which we have held. We hold dates approximately the same time of year in May for the next five or six years.

In 1974 subject to confirmation, the hotel thinks they can give us in June, Thursday afternoon through Sunday afternoon, June 6, 7, 8 and 9.

I only bring this to your attention so you might consider the possibility that if you want to implement the format to changing to different days of the week, it might be possible to do it earlier by changing to the month of June.

SPEAKER DAVIS: Dr. Estes has brought up the point that even though these dates in June will not conflict directly it will put our meeting approximately two weeks prior to the AMA meeting, which is currently in the middle of June.

I have a request that we have an unofficial expression of opinion from you as to whether you had rather retain your Sunday through Wednesday format that you now have and hold the meeting in May, rain or not, or whether you had rather institute at the earliest possible time the Friday through Sunday format, even though this will put you into June.

Is this not the question?

So let me have an unofficial show of hands of those who will favor retaining our present format of meeting on Sunday through Wednesday, a show of hands, please, so that we can remain in the month of May?

[There followed a show of hands.]

Now, how many would favor meeting in June in order to get a format where we will begin on Friday and end on Sunday?

[There followed a small show of hands.]

It would appear that we retain our former setup as it has a majority.

MR. HILLIARD: Please understand in bringing this up we were only trying to make you aware of the fact that it would be several more years before the hotel holds any hope of us meeting the Thursday through Sunday portion

of the week because of the commitments which they hold for other organizations for about as many years as we hold them.

There is little likelihood that we could get a Friday through Sunday date because May is the convention month and they hold just as firm commitments with other organizations for the entire month as they do with us.

SPEAKER DAVIS: Is there other business to come before the House?

DR. LYMBERIS: Mr. Speaker, I am certain I speak for the entire House in thanking the Speaker, the Vice

Speaker, for the excellent conduction of this meeting and fair and impartial discussion which they have moderated.

[Applause]

SPEAKER DAVIS: You're very kind, I'm sure I speak for the Vice Speaker as well as myself in saying that we sincerely appreciate that expression. Thank you.

May I have a motion that we adjourn.

[The motion was made and severally seconded from the floor.]

We therefore stand adjourned. Thank you, gentlemen.

[The meeting adjourned at five-four o'clock.]

President's Dinner

TUESDAY EVENING SESSION

May 23, 1972

The ceremonies of the "President's Dinner" held at the 118th Annual Session of the Medical Society of the State of North Carolina convened at nine-three o'clock in the main dining room of The Carolina Hotel, Pinehurst, North Carolina, Dr. Charles W. Styron, President of the Society, presiding.

PRESIDENT STYRON: Members, Guests, Ladies and Gentlemen:

It's a pleasure to see so many of you here this evening. Nell and I enjoyed the party tremendously seeing all of our guests file in. I knew all of the doctors' names but I told her I didn't know all of the first names of the ladies. She said she certainly was glad to find that out! [Laughter] May I introduce the guests at the head table. I shall ask you to rise and stand and please hold your applause until the presentation is completed.

At this point the President introduced those seated at the head table, each standing to be recognized. They included:

Dr. Harvey Estes, Secretary and Mrs. Estes;

President Elect Dr. John Glasson, and Mrs. Glasson;

Reverend and Mrs. B. Daniel Sapp;

Dr. and Mrs. George Paschal;

And, Dr. and Mrs. Clifford Byrum.

PRESIDENT STYRON: Mrs. Byrum, whom we know as Ruby.

I have a gift that I want to present to you in appreciation from the Medical Society for your wonderful service to us during the year. You have held the job most graciously. You have been very helpful to us and I know myself how hard and effectively you have worked.

Congratulations on a great year!

[Whereupon President Styron then presented the gift to Mrs. Byrum.] [Applause]

I failed to introduce Nell Styron, but Nell if you will stand up and come forward I want to give you a little gift.

[Whereupon Mrs. Styron then came to the podium and President Styron then presented her with a gift.] [Applause]

PRESIDENT STYRON: Of my appreciation for the many favors that you have given me. If I may indulge myself for just a moment, I wish to introduce the members of my staff who have made it possible for me to spend a good deal of time with you this year.

I shall ask each one to stand and, again, withhold your applause until the introductions are finished.

(As the President introduced his staff members and their

spouse or escort they stood to be recognized including the following:

Jane and Eric Gooch!;

Ellie and Aaron Hancock!;

Judy Ambrosio!;

Sharon Johnson!;

Susan Beverley!;

Bob Stevenson!;

Susan and Bob are going to get married in June; and Elaine Beard!

Her middle name is Kay and you will remember that she usually has used this year her initials on the Newsletter EKB—well, that's EKB and she has helped me with the Newsletter.)

PRESIDENT STYRON: And, finally, Doris and Dr. J. Merritt, my long and faithful partner without whom I could not have possibly survived this year.

Thank you.

Now, they're all handsome people. We have some beautiful ones at home also, they could not all come.

Now, obviously, I must acknowledge my debt to the officers, committee members and commissioners and others who have helped me this year and I have a bit of advice to give the incoming President.

One of the rules of the Society for its President is this, that they figure that it is better for the President to wear out than to rust out and this is what they attempt to do during the year!

I remember Roscoe McMillan advised me last year when I came into office, he said, "Charles, you must learn from the mistakes of others. You can't possibly live long enough to make them all yourself!" [Laughter]

If I may, I shall install the officers and I shall ask the following to come forward:

Dr. Frank Reynolds, First Vice President;

Dr. Harry Summerlin, Sr., Second Vice President;

Dr. James Davis, Speaker of the House;

And, Dr. Chalmers Carr, Vice Speaker of the House.

[Whereupon all newly elected officers named above came forward to the podium.]

Now, gentlemen, I shall first read the oath of office:

I SOLEMNLY SWEAR THAT I WILL CARRY OUT THE DUTIES OF MY OFFICE TO THE BEST OF MY ABILITY; I SHALL UPHOLD THE CONSTITUTION OF THE UNITED STATES OF AMERICA AND

THE CONSTITUTION AND BYLAWS OF THE NORTH CAROLINA MEDICAL SOCIETY AT ALL TIMES. I SHALL CHAMPION THE CAUSE OF FREEDOM OF MEDICAL PRACTICE AND FREEDOM FOR ALL OF MY FELLOW AMERICANS.

What say you?

[Whereupon the newly elected officers answered "I do" in unison.] [Applause] Thank you.

Will Dr. George G. Gilbert, President-Elect come forward please?

Dr. Gilbert I shall read the oath of office for you as President-Elect:

I SOLEMNLY SWEAR THAT I WILL CARRY OUT THE DUTIES OF MY OFFICE TO THE BEST OF MY ABILITY; I SHALL UPHOLD THE CONSTITUTION OF THE UNITED STATES OF AMERICA AND THE CONSTITUTION AND BYLAWS OF THE NORTH CAROLINA MEDICAL SOCIETY AT ALL TIMES. I SHALL CHAMPION THE CAUSE OF FREEDOM OF MEDICAL PRACTICE AND FREEDOM FOR ALL MY FELLOW AMERICANS.

What say you?

DR. GEORGE GILBERT: I do.

PRESIDENT STYRON: Thank you, George.

You know, shortly I'm going to take off this badge and pin it on John Glasson. Now, it's my opinion that John is a very gifted man, certainly a very close friend of mine and I think he can look forward to a successful and happy year. I'm sure he will achieve both.

I think that his year will be very successful indeed.

John, will you come forward please?

PRESIDENT STYRON: All right, now I shall administer the oath of office of President.

I, JOHN GLASSON, SOLEMNLY SWEAR THAT I SHALL CARRY OUT THE DUTIES OF THE OFFICE OF THE PRESIDENT OF THE NORTH CAROLINA MEDICAL SOCIETY TO THE BEST OF MY ABILITY. I SHALL STRIVE CONSTANTLY TO MAINTAIN THE ETHICS OF THE MEDICAL PROFESSION AND TO PROMOTE THE PUBLIC HEALTH AND WELFARE. I SHALL DEDICATE MYSELF AND MY OFFICE TO IMPROVING THE HEALTH STANDARDS OF THE AMERICAN PEOPLE AND TO THE TASK OF BRINGING INCREASINGLY IMPROVED MEDICAL CARE WITHIN THE REACH OF EVERY CITIZEN. I SHALL UPHOLD THE CONSTITUTION OF THE UNITED STATES AND THE CONSTITUTION AND BYLAWS OF THE NORTH CAROLINA MEDICAL SOCIETY. I SHALL CHAMPION THE CAUSE OF FREEDOM IN MEDICAL PRACTICE, AND FREEDOM FOR ALL MY FELLOW AMERICANS.

I DO SOLEMNLY SWEAR THAT I WILL DISCHARGE THE DUTIES OF OFFICE TO THE BEST OF MY ABILITY, SO HELP ME GOD.

[Whereup newly elected President John Glasson recited his oath of office as Dr. Styron read it to him.]

Thank you, John. Congratulations!

[Whereupon the entire assemblage then accorded President Glasson a standing ovation.]

PRESIDENT GLASSON: Officers of the Society, Ladies, Colleagues, Guests:

I am proud to become, due to the name change, the first President of the North Carolina Medical Society.

[Applause]

I'd like tonight to address myself to a problem about which there has been much discussion at this meeting, the problem of cooperation between physicians and nurses, a subject which the House of Delegates has addressed itself to.

It's a subject that I recognized as an important subject some thirty years ago at New York Hospital.

At this time, Ella and I kind of established a joint liaison committee at the New York Hospital! Tonight, we're proud to introduce on this occasion our family which is sitting to my right.

I would like to ask them also to stand and remain standing and please withhold your applause until the large group there has been introduced!

First, my eldest daughter, Parkie who lives in Charlotte now and who is married to my first son-in-law, Reverend Treadway Brogdon.

I'm sorry to say my next son, John, is not able to be here tonight due to the fact that he is employed in Illinois and could not travel that far.

I would next like to introduce my son, George, who has just finished his junior year at Duke and has just finished his med. boards.

Next, my son, Joel, prefers to call himself "Joe" so everybody knows him as Joe. He has just finished his freshman year at Carolina.

Then my next two are my twin daughters, Jean and now Jennie. Jean you notice got up first! Now, Jean was five minutes ahead of Jennie! Jean has one syllable in her name, Jennie number two has two syllables. Jean has one crown in her hair, Jennie has two crowns!

At this point, I would like to again pay a special tribute to my partner, Shank Kapoor, who unfortunately could not be with us tonight and his wife, again a person to whom I owe much for my last ten years of participation in the Medical Society affairs.

Dr. Kapoor unfortunately could not be with us tonight, but I want to pay public tribute to him for all that he has done for me in practice and for all the help directly he has given this Society.

Next, I'd like to introduce my brother-in-law and his wife, Dr. George Eddins and his wife, Betty. George is an internist and cardiologist in Albemarle.

Next, I'd like to introduce Mrs. Doris Tippet, my office manager, representing my very fine staff at my office and her husband, E. E. Tippet.

Thank you all so much for being here tonight!

I want to pledge my continued devotion to the duties of this office, to thank all of the officers and all of you members, for the help that you have conferred in the past and for the offers of help as individuals which have been given me in profusion at this meeting and I really appreciate it and I think it holds good for the Medical Society to continue to work together.

I have another pleasant duty, I find, to introduce our illustrious Past President, Dr. George Paschal, who I believe has a pleasant duty to perform in his own right. [Applause]

DR. GEORGE PASCHAL: President Glasson, and I believe that I am the first one to have the privilege to call you by such an appellation; Members of the North Carolina Medical Society, Guests and Other Friends of Dr. Charles Styron:

This hour concludes the presidency of one of the most competent physicians ever to hold this office.

"The lyf so short, the craft so long to lerne," wrote Geoffrey Chaucer.

The man we honor became a master of his craft early and practices it with distinction, bringing credit to the profession. And, it seems the office agrees with him.

Born in New Bern, he went through the various phases of the local educational processes in preparation for admission to North Carolina State University where, in due time, he won his Bachelor of Science degree in Chemistry.

Four years later, he had earned his Doctor of Medicine at Duke University School of Medicine. He interned at Duke and the Boston City Hospitals.

These internships were followed with an Elliot P. Joslin Fellowship in Medicine at the New England Deaconess Hospital.

It was during these years that he did one of the finest things that he ever did for himself, which was as the culmination of seven years of wooing, winning and marrying the delightful, talented, witty and voluptuously beautiful Nell Joslin!

They have a wonderful son and daughter whose activities, interests and talents reflect the depth and breadth of their fascinating parents.

World War II found him where the action was as a Lieutenant Commander in the 4th Marine Division, whose specialty was island hopping to wrest from the Japs territory yielded only with ferocious resistance. Here he demonstrated "guts" which Hemingway defines as "grace under pressure."

For his exploits, he was awarded the Silver Star, the Bronze Star, the Purple Heart and a Presidential Citation.

In 1946, he came to Raleigh where he has worked and lived and played since. He found time to be involved as an Assistant Professor of Medicine at Duke and imposed

upon himself unending continuing education.

This resulted in a wide recognition as one of the most competent physicians in his specialty. In due course, he became a member of all of the appropriate associations and societies in his field.

He is author of numerous papers and contributor to textbooks on Diabetes Mellitus.

Early, he took an active part in organized medicine in which he was progressively on committees at local, county and state levels. For nine years, he was Constitutional Secretary of this Society.

All of this prepared him well for his exceptional performance as our President this year. For several years now, he has been and is a member of the American Medical Association's Council on Food and Nutrition.

Now, Charles W. Styron, the last President of the Medical Society of the State of North Carolina, I have the great privilege, in behalf of the newly named North Carolina Medical Society, to present to you the President's Jewel as a token of admiration, esteem and affection from those you have served with such dedication and distinction.

Congratulations, sir!

[Whereupon Dr. Paschal then presented to Dr. Styron the President's Jewel and the entire assemblage then accorded Past President Styron a standing ovation.]

PAST PRESIDENT STYRON: Thank you, very much.

PRESIDENT GLASSON: This concludes the formal part of the program and the banquet tonight.

We invite you after a short respite to gather in the Cardinal Ballroom where there will be a program of entertainment followed by dancing.

I want to thank you all for coming. Goodnight!

[The meeting adjourned at nine-thirty-five o'clock.]

General Sessions

MONDAY MORNING SESSION

May 22, 1972

The First General Session of the 118th Annual Meeting of the Medical Society of the State of North Carolina convened at eleven-fifteen o'clock in the Cardinal Ballroom of The Carolina Hotel, Pinehurst, North Carolina. Dr. Charles W. Styron, President of the Society, presiding.

PRESIDENT STYRON: Members and Guests:

The first general session of the Medical Society at its annual meeting will now convene.

I shall first call on the Reverend Martin Caldwell, Rector of the Emanuel Episcopal Church, Southern Pines, for the invocation.

REVEREND MARTIN CALDWELL: Let us pray:

O Lord, who art the ultimate healer of all diseases and who knoweth how the sick hath needeth of a physician, let Thy perpetual providence guide and direct all who serve Thee by serving their fellowmen.

Instruct all whom Thou hast called to be sharers in Thy ministry to men that the pain and the grief of the world may be lightened and the horizons of our knowledge enlarged, through Jesus Christ, Our Lord.

Amen!

PRESIDENT STYRON: Thank you.

You will see that there has been a change in the program. Arthur Brooks of Vanderbilt, an othopaedic surgeon, was to

talk at this meeting and unfortunately he was called to Algeria with a commission to work with the Algerian Government but was able to call on Harvey William Bender, Jr., M.D. to talk to us this morning.

I am especially grateful to both Dr. Brooks and to Dr. Bender for making this arrangement.

His primary interest is cardiovascular surgery and physiology.

His bibliography is extensive for such a young man and, indeed, interesting.

Dr. Bender is going to talk to us this morning on the "Management of Angina Pectoris."

Dr. Bender, we appreciate having you here!

[Applause]

DR. HARVEY W. BENDER [Professor of Surgery, Vanderbilt University School of Medicine]: Thank you, very much, Dr. Styron.

It's a pleasure for me to be here at Pinehurst and be a guest of this very distinguished State Medical Society.

The subject that I'd like to talk about this morning is the "Management of Angina Pectoris." I specifically did not mention whether this was surgical management or medical management because I think that with a very careful evaluation of the patients with angina pectoris and a very

concerted team effort of cardiologists and cardiac surgeons that we can now manage these patients with this very common problem much better than we could in the past. (Whereupon Dr. Bender presented his prepared address with accompanying slides. His paper will be submitted to the NORTH CAROLINA MEDICAL JOURNAL for possible publication.)

PRESIDENT STYRON: Thank you, very much, Dr. Bender for that very interesting talk. It's now my pleasure to introduce to you the President-elect of the American Medical Association, Charles A. Hoffman, known by his friends as Carl.

Dr. Hoffman is both a pharmacist and a surgeon. He is certified by the American Board of Urology. He is a busy practitioner, except this year.

He has published extensively. He is well known throughout the nation and throughout medical circles as an energetic and effective spokesman for medicine.

To summarize his many contributions to medicine and to the public-at-large would, indeed, be almost impossible. However, I shall say in addition to his many contributions of this nature, he has also been a member of a number of Presidential committees and commissions.

It gives me great pleasure to present to you the President-

elect of the American Medical Association, Charles A. Hoffman, M.D.

[Whereupon the entire assemblage then accorded Dr. Hoffman a standing ovation.]

DR. CHARLES A. HOFFMAN [President-elect, American Medical Association]: Thank you, very much.

President Styron, Dr. Bender, Fellow Physicians and Guests:

It's really a great pleasure for Lynn and I to be with you here and I feel, as I said yesterday, almost as if I'm at home. I look around and see the many friends that I've known over many years here and of course I do have some practicing in North Carolina. I feel very close to this State and last night, Lynn and I were treated royally by the Fuller's and we had a delightful evening.

I'm sorry we have to leave this afternoon but I do have to get back to the American Urological Association in Washington and speak there tomorrow. (Whereupon Dr. Hoffman delivered his address which will be submitted to the NORTH CAROLINA MEDICAL JOURNAL for publication.)

PRESIDENT STYRON: Thank you.

Are there further announcements? If not, we stand adjourned.

[The meeting adjourned at twelve-ten o'clock.]

TUESDAY MORNING SESSION

May 23, 1972

The Second General Session of the 118th Annual Meeting of the Medical Society of the State of North Carolina convened at eleven-ten o'clock, Dr. Kenneth E. Cosgrove, First Vice President of the Society, presiding.

CHAIRMAN COSGROVE: Ladies and Gentlemen:

Would everybody please come in and sit down so we can get this show on the road?

Ladies and gentlemen, the Second General Session will now come to order.

I would like to make one announcement. There's a helicopter that has landed on the grounds of the hotel and this is here to demonstrate emergency air transportation. It is a joint venture of the military and the Highway Patrol.

It will be here until one o'clock and if you're interested in seeing this and asking questions, please try and see it before one o'clock today.

Our subject today as you know is genetics and genetics is another science which has come to fruition in the twentieth century and as this century catapults along the traditional field of hereditary genetics has been joined by the equally broad fields of physiological and evolutionary genetics.

But, more important, they are here to discuss the common modes of inheritance with examples, the role of the practicing physician in genetic counselling and types of patients appropriate for referral to counselling programs, especially for antenatal diagnosis.

To introduce the members of the panel, I should like to ask Dr. Charles Styron to undertake this.

PRESIDENT STYRON: Mr. Chairman, Members of the Society and Guests:

Earlier in the year, we were trying to decide on some topics for the general sessions. It occurred to me that none was more appropriate than the topic that we shall hear this morning.

I thought of possible individuals to appear on such a panel and since our moderator, Dr. Carey Bostian, was the most distinguished geneticist that I knew, it was obvious

that he should be the moderator of this panel and plan it for us.

Dr. Bostian is a graduate of Catawba College and the University of Pittsburgh where he received a Ph.D. in Zoology and Genetics.

For many years, he has been a professor at North Carolina State University. His current title is Professor of Genetics.

In 1968, he was the most distinguished professor on the campus by a vote of the students. I had the privilege of seeing Dr. Bostian thus honored. It was really impressive indeed.

Also, in 1953 to 1959, Dr. Bostian was Chancellor of North Carolina State University and was in great demand as a consultant in education, in science and as a speaker throughout the state, but because of his great interest in research and in teaching, he returned to his old position as a Professor of Genetics.

Now, Dr. Bostian is the recipient of many awards. He is a member of all of the appropriate societies. He has received three honorary Doctor of Science degrees.

His field, in particular, and his particular interest, of course, is teaching.

Dr. Bostian is a man who gets the message across. I appreciate very much his taking on this assignment and I am sure we shall enjoy the presentation of Dr. Bostian and his panel.

DR. CAREY H. BOSTIAN [Professor of Genetics, North Carolina State University, Raleigh, N. C.]: When this invitation came for me to plan a panel on genetic counselling, I said I would do it provided I could get Dr. Neil Kirkman and Dr. Harold Goodman to come along with me and do most of the talking, because they are men actively engaged in genetic counselling and I am engaged in it principally from the teaching standpoint.

(At this point the Moderator introduced the other two participants on the Panel: Dr. Henry N. Kirkman, Profes-

sor of Pediatrics and Director of Genetic Counselling Program, University of North Carolina, Chapel Hill; and Dr. Harold O. Goodman, Professor of Medical Genetics, Bowman Gray School of Medicine, Winston-Salem.)

(Comments by each of the panelist will be submitted to the NORTH CAROLINA MEDICAL JOURNAL for possible publication.)

MODERATOR BOSTIAN: I think you should know that the most complete genetic counselling services are now in Chapel Hill, at Memorial Hospital, where Dr. Kirkman is the Director of the Counselling Service and at Bowman Gray where Dr. Goodman and his associates are present.

But considerable genetic counselling is going on at other centers and at some of the larger hospitals in the state and in a few years, I think it will be much more widely available than at the present time.

Mr. Chairman, our time is up and I'm sorry we will not have an opportunity for questions, but if you have any, you may send them to Dr. Kirkman or to Dr. Goodman. If you send them to me, I'll probably refer them on to them.

Thank you, very much.

[Applause]

CHAIRMAN COSGROVE: Perhaps right after the session, if anybody has questions, they can ask these three gentlemen.

Dr. Bostian, Dr. Kirkman and Dr. Goodman, may I express our collective thanks to you all for coming here today.

The science of genetics is one which clinical medicine

is not well informed about as yet and this discussion has been most helpful.

Now, ladies and gentlemen, may I introduce our talented and forthright President.

He is about to conclude a very important chapter in his Book of Life, a chapter full of challenge and decisions punctuated by a few triumphs, a few mistakes, quite a few exclamation points and no failures.

The general theme has been hard work, good judgment. It has been a privilege for many of us in the Society to serve as supporting characters in this 1972 story and I think all of us here would like to say congratulations for a job well done, Charlie Styron!

[Whereupon the entire assemblage then accorded President Styron a standing ovation.]

PRESIDENT STYRON: Mr. Chairman, Members and Guests:

With that introduction, I thought for a moment that somebody else was going to stand up! As it turned out, everybody did! [Laughter]

[Whereupon President Styron then delivered his prepared address which was published in the NORTH CAROLINA MEDICAL JOURNAL. See Vol. 33, No. 7, July, 1972. At the conclusion of his address President Styron was again accorded a standing ovation.]

CHAIRMAN COSGROVE: I would like to conclude this session by saying, Dr. Styron, you may now return to the green, green pastures of the golf course with our blessing

[The meeting adjourned at twelve-thirty-one o'clock.]

WEDNESDAY MORNING SESSION

May 24, 1972

The Third General Session of the 118th Annual Session of the Medical Society of the State of North Carolina convened at nine-ten o'clock, Dr. William H. Romm, Second Vice President of the Society, presiding.

CHAIRMAN ROMM: The Third General Session of the North Carolina Medical Society will now convene.

I'd like to turn this part of the program over to Dr. Paul Maness, Vice Chairman of the North Carolina State Board of Health.

COINJOINT SESSION WITH THE STATE BOARD OF HEALTH

DR. PAUL MANESS [Vice Chairman, North Carolina State Board of Health]: Thank you, Dr. Romm.

My statement can be made in one sentence:

The State of North Carolina, I think, is very fortunate to have Dr. Jacob Koomen as State Health Director and I now present him to you.

Dr. Koomen!

[Whereupon Dr. Jacob Koomen, Director, North Carolina State Board of Health, then read his prepared address which will be submitted to the North Carolina Medical Journal for possible publication.]

CHAIRMAN ROMM: Thank you, Dr. Koomen, for your very interesting and informative talk.

I'd now like to call on Dr. Simmons Patterson, Chairman of the Committee on Awards to present the annual scientific award.

DR. F. M. SIMMONS PATTERSON [Chairman, Committee on Awards]:

It is always a distinct pleasure for me and an honor to

serve as the Chairman of the Committee on Scientific Awards.

Although the work of this committee each year has increased, the number of outstanding presentations made at the annual meeting of the North Carolina Medical Society has increased accordingly.

As many of you know, there are three awards that we give each year; Moore County award, Wake County award and the Gaston County award.

I thought also it would be interesting to the group here today to know a little bit about the origin of these awards, so I went back through the minutes of the House of Delegates to August 1951 and I want to read verbatim what is written in the minutes concerning the individual awards.

First, the Moore County Medical Society medal.

In 1927, the Moore County Medical Society established a fund, the interest from which is used to pay for a medal to be given for the best paper read at the State Society each year. No one is eligible to receive this medal except fellows of the Medical Society of the State of North Carolina in good standing. No invited guest is allowed to compete.

The first medal was presented in 1928 and was won by the late Dr. Paul McCain.

In other words, this medal, the Moore County medal, is presented each year for the best all-around best scientific paper presented by a member of what we now term the North Carolina Medical Society.

In addition, this year, Moore County is giving a monetary award along with the medal and it is with great pleasure

that at this time I announce the recipient of this award, Dr. Herbert J. Proctor of the Department of Surgery of the University of North Carolina School of Medicine which was presented at the Section on Surgery on May 17th, 1971.

As often happens with surgeons, unforeseen events come up and Dr. Proctor informed me yesterday he would be unable to be present today to accept this award, so I've asked Dr. Fleming Fuller, who is a member of the Board of Directors of the North Carolina Memorial Hospital, to accept this award in the absence of Dr. Proctor.

[Whereupon Dr. Fleming Fuller then came forward to the podium to accept the award for Dr. Proctor.]

DR. PATTERSON: Referring again to the minutes of the House of Delegates of August 1951, I read:

By authority of the House of Delegates, the Memorial Award established by the Wake County Medical Society in tribute to George Marion Cooper, M.D. late Assistant State Health Officer, will be awarded for the best paper presented annually at the annual session of the State Society. Competition will be restricted to those papers on subjects of public health preventive medicine or maternal and child health. Program chairmen of the ten scientific sections—[You see our sectional number has increased]—will take note of this in preparation of the 1952 program and the judging of papers presented at the annual session in 1952.

In other words, this prize is given as stated for papers on public health, preventive medicine, maternal and child welfare.

I'm very happy to announce the winner of this award, Dr. Takey Crist of the Department of Obstetrics and Gynecology of the University of North Carolina School of Medicine, the paper entitled, "Abortion—Where Have We Been? Where Are We Going?"

This was presented at the Section on the General Practice of Medicine on May 18th, 1971.

Dr. Crist will come forward please.

[Whereupon Dr. Takey Crist then came forward to the podium to accept the award.] [Applause]

DR. TAKEY CRIST: Thank you, very much.

DR. PATTERSON: I forgot to mention that in addition to the medal, Dr. Crist also received a monetary award.

Referring once again to the minutes of August 1952:

In recognition of the increasing prominence now given to the presentation of scientific material by means of various forms of visual media, the Gaston County Medical Society a few years ago established an award for an outstanding presentation using this type of presentation. This includes scientific exhibits by any member of the State Society; motion pictures, lantern slide presentations, including live subjects by members of the Society.

This award, the Gaston County Medical Society award, for the best presentation of a scientific and educative subject of a medical nature through the use of media of visual aids this year is awarded to Dr. Paul James, the Department of Surgery of the Bowman Gray School of Medicine, for his presentation to the Section on Surgery on May 17th, 1971, entitled, "Hyperalimention."

[Whereupon Dr. Paul M. James, Jr., came forward to the podium to accept the award.] [Applause]

DR. PAUL M. JAMES, JR.: Thank you, very much.

CHAIRMAN ROMM: Thank you, Dr. Patterson.

I would now like to call upon Dr. A. J. Tannenbaum, Chairman of the Committee on AMA-ERF, Education Research Foundation, to make a presentation.

DR. A. J. TANNENBAUM [Chairman, Committee on

AMA-ERF]: Ladies and Gentlemen: It is a distinct privilege for me to be selected to present to the three medical schools of North Carolina money given by our physicians and our auxiliary so the students in our state might not be hampered in financing their medical education.

In 1971, we physicians contributed \$21,505.71.

Money has become tight. Students are finding it harder to get funds from federal as well as private sources. Interest rates are high and will continue to rise and as a result of this financial squeeze, more medical students are turning to AMA-ERF for help and because of your assistance, no student has yet been turned down for lack of funds and there were 2400 loans taken out in 1971.

Also, of interest to us all is that the AMA-ERF does not take one dollar off of the top for expenses. The AMA pays all operating costs including salaries and expenses of staff members.

Your money goes entirely to the benefit of needy young doctors in training and now may I present these checks to our four medical schools for aid of students.

For Duke University:

[Whereupon Dr. Harvey Estes came forward to the podium to accept the award.]

It is a distinct pleasure since this was also my alma mater! [Applause]

DR. ESTES: Thank you very much.

DR. TANNENBAUM: Bowman Gray School of Medicine! Would anyone care to accept the check for the Bowman Gray School of Medicine? [No response]

I think they probably need it as much as anybody else! But, we'll get it to them.

The University of North Carolina School of Medicine!

[Whereupon Dr. Christopher Fordham came forward to the podium to accept the award.]

My good friend and colleague, Dr. Fordham! [Applause]

DR. CHRISTOPHER FORDHAM, III: Thank you, sir.

DR. TANNENBAUM: And now, we have a check for our newest medical school in North Carolina, the East Carolina University School of Medicine.

Do they have a representative here to accept their check? [No response]

I know they need it. We will forward this to them.

CHAIRMAN ROMM: Thank you, Dr. Tannenbaum.

Certainly, one of the highlights of the annual meeting is the Recognition of the Nurse of the Year.

I'd like to call upon Dr. William B. McCutcheon, Jr., Chairman of our Committee of Physicians on Nursing.

Dr. McCutcheon!

DR. WILLIAM B. McCUTCHEON, JR. [Chairman, Committee of Physicians on Nursing]: Dr. Romm, Guests and Members:

First, I would like to compliment the county societies in the State of North Carolina who cooperated in such a fine way in this effort, to honor our nursing colleagues.

They did their job so well that the members of the committee found themselves faced with an almost impossible task when confronted with the candidates who were submitted by the various societies.

The qualifications of the candidates were so high and so outstanding that it was an extremely difficult job indeed to select any one.

There was one, however, who after the selection of the Nurse of the Year award was made, it was felt deserved special recognition because of her outstanding service and devotion to duty over a period of many, many years.

I would like, at this time, to ask Mrs. Margaret Irene Las-

siter to come forward if she will and stand beside me while I read a citation, a special award for distinguished service to nursing.

[Whereupon Mrs. Margaret Irene Lassiter then came forward to the podium.]

CITATION

From origins in Tidewater, Virginia, nursing training in Bellevue Hospital in New York City and public health education in major national universities, Margaret Irene Lassiter came, over a third of a century ago, as the first Public Health Nurse to Harnett County. Working in her early years from a truck at country stores and cross-roads she has been a moving force in the development of exemplary health services and facilities for her community. As the Health Department grew, Miss Lassiter became Nursing Supervisor and now holds appointment also as Acting Health Director. These years have seen her hand in the development of a full spectrum of clinics and services for people of all ages and circumstances.

Miss Lassiter has also worked unstintingly for health causes in the State and Nation, serving in White House Conferences for Children and for the Aged, fulfilling teaching assignments in her field in various colleges in North Carolina, and serving on many boards and committees which have fostered health care and the nursing profession. Despite the demand of these pursuits she has also been a consistent church participant and civic leader.

The physicians who know Miss Lassiter best and who have benefitted over the years not only from her services but as well from her "counsel, assistance and encouragement," this year "immediately and unanimously" selected her as *Harnett County Nurse-of-the-Year*. These physicians described her as a beloved and valued co-worker; citing her "integrity, forthrightness, dependability, understanding, compassion, ability clearly to point out the need for public health, ability to convince the public and their local officials that they want to support a program financially and otherwise, ability to promote good will among her staff and that of other agencies and groups with whom she works, ability to lead democratically, a sense of humor, and dedication to serving the needs of people." All physicians applaud these attributes as those of a master nurse and superb person.

[That was a quotation from a letter received from Harnett County.]

In this year of 1972, the Medical Society of the State of North Carolina is proud to present to Miss Margaret Irene Lassiter, R.N., a *Special Award for Distinguished Service to Nursing in North Carolina*.

This Citation I present along with a token of esteem of the physicians of the State.

[Whereupon Dr. McCutcheon then presented the award to Miss Margaret Irene Lassiter.] [Applause] Congratulations!

MISS MARGARET IRENE LASSITER: Thank you so very much.

DR. MCCUTCHEON: And, now it's my pleasure to present Dr. A. R. Pittman, from Lumberton, North Carolina, who is Chairman of the committee of the Robeson County Medical Society who selected the Robeson County Nurse-of-the-Year, who was ultimately selected the Nurse-of-the-Year of North Carolina and he will make that presentation at this time.

DR. A. R. PITTMAN: Dr. Romm. Dr. McCutcheon, Members of the Society and Guests:

Robeson County is justly proud that the committee has selected for Nurse-of-the-Year our nominee, Mrs. Rebecca Helms Thompson.

Before making the presentation, I would like to read a letter that our committee addressed to Dr. McCutcheon and I would like to address it to all the members of the Society:

The Robeson County Medical Society has selected Mrs. Rebecca (Becky) Helms Thompson as our Nurse-of-the-Year and is pleased and honored to have her as a candidate for North Carolina Nurse-of-the-Year.

Her selection was made primarily for the outstanding job that she has done in the coronary care unit and intensive care unit at Southeastern General Hospital, not only in providing excellent nursing care and supervision, but in teaching other members of the nursing staff the principles of coronary care and cardio-pulmonary resuscitation.

We were not surprised to find that she has been involved in many outside activities that make a real difference in our community. She is a nurse who enjoys her vocation as a true "Angel of Mercy." Her avocations have to a large extent been in serving her community, not for want of reward but for the pleasure of serving and making Lumberton a better place to live.

It is impossible in the short time allotted to tell all that Becky has done. She came to us in 1964, graduated in 1964 and has been with us most of the time since.

She has been an outstanding nurse and a real pleasure to work with and has done a real outstanding job in our coronary care unit.

It is my honor at this moment to present her to you and I will ask her to come forward while I read the citation.

[Whereupon Mrs. Rebecca Helms Thompson then came forward to the podium.] [Applause]

Becky, the citation reads as follows:

CITATION

Rebecca Helms Thompson, a native of Southport, was graduated from Southeastern General Hospital School of Nursing in 1964. While a staff nurse in Dosier Memorial Hospital in Southport she married and returned to her alma mater in Lumberton where she has since risen promptly and deservedly to positions of high responsibility and service. She has continued her professional education through numerous post-graduate courses, has made herself expert in the emerging fields of specialty nursing in intensive care and coronary care and serves now as Supervisor of both these units in Southeastern General Hospital.

During these years, Mrs. Thompson has mothered two children, one son and one daughter, and has maintained an active home life with her family. Her husband, a young civic worker on his own, has been joined by his wife in many community and church activities. In addition to much work in professional training of her hospital co-workers, Mrs. Thompson has also devoted attention to indoctrinating lay groups in emergency medical care, and has been active in professional nursing groups and volunteer health organizations and campaigns.

There has been an unprecedented outpouring of endorsements from the physicians of Robeson County as to Mrs. Thompson's professional competence and commitment and from her fellow citizens as a worthy and compassionate practitioner of the healing arts.

In this year of 1972, the Medical Society of the State of North Carolina is proud to name Mrs. Rebecca Helms Thompson, R.N., as *North Carolina Nurse-of-the-Year*. [Whereupon Dr. Pittman then presented to Mrs. Thompson an engraved silver tray and the Citation.] [Applause]

MRS. REBECCA HELMS THOMPSON: Thank you.

CHAIRMAN ROMM: Thank you.

It's always a pleasure to come to this part of our program when we have the pleasure and the honor of calling upon our distinguished colleagues who have joined the FIFTY YEAR CLUB.

I'd like to ask Dr. Harvey Estes, if he will, to make these presentations.

DR. E. HARVEY ESTES, JR. [Secretary of the Society]: Dr. Romm, Members and Guests:

As Secretary of the Medical Society and by action of the Executive Council which has been adopted by the House of Delegates of the North Carolina Medical Society, I hereby recognize the FIFTY YEAR CLUB of the North Carolina Medical Society.

This is composed of those members of the Medical Society who have gained that distinction by fifty year period of active practice and active medical service in this state.

It will be the purpose of this Society to recognize new members on the occasion of each annual meeting and thereby to give due recognition to the surviving members of the Club.

I wish on this occasion to extend to those members whose names I will call the congratulations and admiration of the Medical Society and all its members as well as of your many friends for the wonderful attainment represented by each of you and by the group collectively.

It gives me a great deal of pleasure to present for the North Carolina Medical Society this FIFTY YEAR CLUB and to grant each of the new members thereof a scroll which may serve in the future to indicate your achievements and your distinction.

And, I'm also happy to present a token, a pin, which you may wear to indicate to your fellow physicians and your friends the distinction which has been given to you by this Society today.

I will call each individual man's name and I will ask him to come forward and stand here.

Dr. James Meredith Ketchie!

Dr. Blackwell Markham!

Dr. William Blount Norment!

Dr. Robert Alexander Ross!

Dr. Paul Frederick Whitaker!

Dr. William Hollister!

[Whereupon Dr. Estes presented those present with their jewel and scroll.]

For the two members who were able to be with us today, I extend again our sincere congratulations and best wishes. [Applause]

I have one additional duty which was not part of the program today.

For those who are familiar with the activities of the Society over the last few years, you will be well aware of the North Carolina Association of Professions. This is an inter-professional organization whose chief objectives are to promote cooperation and mutual endeavors among all the professions within the state.

The North Carolina Association of Professions has extended a special award to a man who has really done more in my estimation to forward the activities of this group in

the past five or six years that it has been here than anyone I know of.

The North Carolina Association of Professions presents an award of appreciation to Dr. George G. Gilbert, President-elect.

George, will you come forward?

[Whereupon Dr. George G. Gilbert then came forward to the podium and received the award.] [Applause]

DR. GEORGE G. GILBERT: All kinds of surprises! Thank you very much.

DR. ESTES: Congratulations Dr. Gilbert. That concludes the presentations, Mr. Chairman.

CHAIRMAN ROMM: Thank you, very much, Dr. Estes.

It gives me a great deal of pleasure this morning to introduce our next speaker, Dr. David Savitz, who will speak on the "Concepts of Medical Practice for the Future."

Dr. Savitz has directed the Comprehensive Health Program at the Reynolds Memorial Hospital in Winston-Salem.

DR. DAVID SAVITZ [Reynolds Memorial Hospital, Winston-Salem, N. C.]: Thank you, Dr. Romm.

My topic this morning is listed as "Concepts of Medical Practice for the Future," but let me say right away that I really don't have any detailed knowledge of how medical practice will be organized in the future. The only thing I think we can say with assurance is that it won't conform to any single blueprint, not in a nation like ours with all its diversity and with the high value that we place on pluralism.

[Whereupon Dr. Savitz delivered his address which will be submitted to the North Carolina Medical Journal for possible publication.]

CHAIRMAN ROMM: Thank you, very much, Dr. Savitz, for this interesting look into the future.

This has been a very provocative talk and I wish that we could go through with the Question and Answer Period. I am sure Dr. Savitz will be glad to discuss any of these questions you may have later on.

Over the years, there has been an increasing importance to the role of physicians, particularly in athletics.

I think it's very timely today that Dr. Frank Wilson, Chairman of the Department of Orthopaedics of North Carolina Memorial Hospital is here to speak to us on "The Role of the Physician in Sports Medicine."

It gives me a great deal of pleasure to introduce Dr. Wilson.

DR. FRANK C. WILSON [Chief, North Carolina Memorial Hospital, Department of Orthopaedics, Chapel Hill, N. C.]: Dr. Romm, members and Guests of the Society: While the title of this talk is, "The Role of the Physician in Sports Medicine," it should immediately be apparent that the medical care of athletes represents a joint effort on the part of the athlete, school officials, coach, parents, athletics trainers and physician.

[At this point Dr. Wilson presented his address supplemented by slides. His address will be submitted to the North Carolina Medical Journal for possible publication.]

CHAIRMAN ROMM: Thank you, very much, Dr. Wilson, for this very informative talk.

I'm sorry that time does not permit a question and answer period. I'm sure that Dr. Wilson will be available for any questions you may have later on.

Certainly, the highlight of our final session is the annual address of our new President.

It gives me a great deal of pleasure to present our distinguished President, Dr. John Glasson.

[Whereupon the entire assemblage then accorded President Glasson a standing ovation.]

PRESIDENT GLASSON: Thank you.

I wish you could just go on clapping and then we could just leave the address off, but it's my duty, so I would like to open by saying that seldom does any speaker get introduced by a dear friend, my friend, Bill Romm.

So, Dr. Romm, Distinguished Guests, Members of the Society:

[Whereupon President Glasson then read his prepared address which was published in the North Carolina Medical Journal. See Vol. 33 No. 8, August, 1972. At the con-

clusion of his address the entire assemblage again accorded him a standing ovation.]

CHAIRMAN ROMM: I want to thank Dr. Glasson for this very outstanding address.

I am sure I speak for everyone in extending to Dr. Glasson our best wishes for a very successful year. Personally, John, I'm going to miss you on the tennis court.

That concludes the formal part of our meeting this morning.

[Whereupon this part of the meeting adjourned at twelve-two o'clock.]

MEDICAL AWARDS

Moore County Medical Society Medal

In 1927 the Moore County Medical Society established a fund, the interest from which is used to pay for a medal to be given for the best paper read at the State Society meeting each year. No one is eligible to receive this medal except Fellows of the Medical Society of the State of North Carolina in good standing; no invited guest is allowed to compete.

Each Section Chairman selected a committee of three to decide on the best paper in their section. The winning papers are then turned over to the State Committee, who select the one to receive the medal. The following award was made:

1971—Herbert J. Procter, M.D., Chapel Hill

"POST TRAUMATIC PULMONARY INSUFFICIENCY"

(Section on Surgery, May 17, 1971)

The George Marion Cooper Award

The Fellows of the Wake County Medical Society present the George Marion Cooper Award established in honor of George Marion Cooper, physician and health benefactor.

This medal is awarded by the Fellows of the Wake County Medical Society as a token of appreciation and esteem in recognition of the eminence of an essay contributing to the knowledge and advancement of the science of medicine in the field of Preventive Medicine, Public Health, or Maternal and Infant Health Care, presented before the

Medical Society of the State of North Carolina. The following award was made:

1971—Takey Crist, M.D., Chapel Hill

"ABORTION — WHERE HAVE WE BEEN?
WHERE ARE WE GOING?"

(Section on General Practice of Medicine, May 18, 1971)

Gaston County Medical Society Award

By authority of the House of Delegates an Award is established by the Gaston County Medical Society for the best presentation of audio-visual material in scientific treatise and will be awarded to the best presentation annually at the annual Session of the State Society. Competition will be restricted to audio-visual material as provided by the rules. Program Chairmen of the eleven scientific sections should take note of this in the preparation of the 1956 program and in judging of the presentations of the Annual Session in 1956. The following award was made:

1971—Paul M. James, Jr., M.D., Winston-Salem

"HYPERALIMENTATION"

(Section on Surgery, May 17, 1971)

NOTE: The Gaston County Medical Society has discontinued the presentation of this medal. The Medal presented for the 1971 winner was the last one of these medals.

HISTORICAL DATA

In the interest of economy the lengthy Historical Data printed in the Transactions will only be printed every five years. Only the information relating to recent years is included here.

Should any member desire additional Historical Data, he

may request the information for earlier years from the Medical Society Headquarters Office at 222 North Person Street, (Mail address: P. O. Box 27167) Raleigh, North Carolina 27611.

HISTORY OF THE NORTH CAROLINA MEDICAL SOCIETY ANNUAL MEETINGS

Date	Place of Meeting	Number in Attendance	President	President-Elect	Vice Presidents	Sec.-Treas.	Members on Roll	Honorary Members	Life Members
1945	No meeting because of O.D.T. restrictions		Paul F. Whitaker.....	Oren Moore.....	Wm. H. Smith Zack D. Owens.....	Roscoe D. McMillan...	1,811	7	383
92 1946	Pinehurst.....	889	†Oren Moore.....		†Wm. H. Smith Zack D. Owens.....	Roscoe D. McMillan...	1,939	6	397
93 1947	Virginia Beach, Va.....	444	†Wm. M. Coppridge.....	Frank A. Sharpe.....	G. E. Bell J. B. Bullitt.....	Roscoe D. McMillan...	2,191	7	404
94 1948	Pinehurst.....	920	†Frank A. Sharpe(†).....	James F. Robertson.....	V. K. Harp J. G. Raby.....	Roscoe D. McMillan...	2,298	8	407
95 1949	Pinehurst.....	998	James F. Robertson.....	G. Westbrook Murphy.....	Joseph J. Cobbs Joseph A. Elliott.....	Roscoe D. McMillan...	2,318	5	405
96 1950	Pinehurst.....	947	†G. Westbrook Murphy.....	Roscoe D. McMillan.....	Ben F. Royal Joseph A. Elliott.....	Millard D. Hill.....	2,283	5	455
97 1951	Pinehurst.....	938	Roscoe D. McMillan.....	Frederic C. Hubbard.....	Joseph A. Elliot Henderson Irwin.....	Millard D. Hill.....	2,341	5	469
98 1952	Pinehurst.....	969	Frederic C. Hubbard.....	J. Street Brewer.....	Forest M. Houser Arthur Daughtridge.....	Millard D. Hill.....	2,326	5	476
99 1953	Pinehurst.....	1,016	J. Street Brewer.....	Joseph A. Elliott.....	George W. Paschal John R. Bender.....	Millard D. Hill.....	2,673	5	486
100 1954	Pinehurst.....	1,077	†Joseph A. Elliott.....	Zack D. Owens.....	John F. Foster Julian A. Moore.....	Millard D. Hill.....	2,801	6	486
101 1955	Pinehurst.....	991	Zack D. Owens.....	J. P. Rousseau.....	George W. Paschal, Jr. Elias S. Faison.....	Millard D. Hill.....	2,896	6	507
102 1956	Pinehurst.....	1,022	†James P. Rousseau.....	Donald B. Koonce.....	E. W. Schoenheit Milton S. Clark.....	Millard D. Hill.....	3,058	7	561
103 1957	Asheville.....	867	Donald B. Koonce.....	Edward W. Schoenheit.....	John S. Rhodes O. Norris Smith.....	Millard D. Hill.....	3,127	8	522
104 1958	Asheville.....	781	Edw. W. Schoenheit.....	Lenox D. Baker.....	George W. Holmes Amos N. Johnson.....	Millard D. Hill.....	3,171	9	542
105 1959	Asheville.....	651	Lenox D. Baker.....	John C. Reece.....	Amos N. Johnson Kenneth B. Geddie.....	John S. Rhodes.....	3,211	10	251
106 1960	Raleigh.....	848	John C. Reece.....	Amos N. Johnson.....	Chas. M. Norfleet, Jr. W. Walton Kitchin.....	John S. Rhodes.....	3,247	12	472
107 1961	Asheville.....	636	Amos N. Johnson.....	Claude B. Squires.....	Theodore S. Raiford Charles T. Wilkinson.....	John S. Rhodes.....	3,248	12	438
108 1962	Raleigh.....	745	†Claude B. Squires.....	John R. Kernodle.....	John A. Payne, III J. Sam Holbrook.....	John S. Rhodes.....	3,339	9	425
109 1963	Asheville.....	714	John R. Kernodle.....	John S. Rhodes.....	II, Fleming Fuller Jacob H. Shuford.....	Charles W. Styron.....	3,491	9	431
110 1964	Greensboro.....	677	John S. Rhodes.....	T. S. Raiford.....	Wm. F. Hollister F. G. Patterson.....	Charles W. Styron.....	3,473	8	398
111 1965	Charlotte.....	738	†T. S. Raiford.....	George W. Paschal, Jr.....	Hubert McN. Poteat Wayne J. Benton.....	Charles W. Styron.....	3,516	8	390
112 1966	Asheville.....	545	George W. Paschal, Jr.....	Frank W. Jones.....	W. Otis Duck John L. McCain.....	Charles W. Styron.....	3,597	12	339
113 1967	Pinehurst.....	644	Frank W. Jones.....	Robert A. Ross.....	David G. Welton Daniel A. McLaurin.....	Charles W. Styron.....	3,606	14	302
114 1968	Pinehurst.....	623	Robert A. Ross.....	David G. Welton.....	E. T. Beddingfield, Jr. James S. Raper.....	Charles W. Styron.....	3,642	13	298
115 1969	Pinehurst.....	577	David G. Welton.....	Edgar T. Beddingfield, Jr.....	John Glasson Mark McD. Lindsey.....	Charles W. Styron.....	3,674	13	298
116 1970	Pinehurst.....	580	Edgar T. Beddingfield, Jr.....	Louis deS. Shaffner.....	Robert P. Crouch Rose Pully.....	Charles W. Styron.....	3,711	14	289
117 1971	Pinehurst.....	575	Louis deS. Shaffner.....	Charles W. Styron.....	George G. Gilbert James G. Jones.....	E. Harvey Estes, Jr.....	3,765	14	287
118 1972	Pinehurst.....	543	Charles W. Styron.....	John Glasson.....	Kenneth E. Cosgrove William H. Romm.....	E. Harvey Estes, Jr.....	4,059	15	267

(†) Deceased.

(‡) Died during term of office; succeeded by James F. Robertson, president-elect.

ROSTER OF MEMBERS OF NORTH CAROLINA STATE BOARD OF HEALTH

Name	Address	Appointed by	Term
James S. Raper, M.D.	Asheville	Medical Society	1967 to 1971
Paul F. Maness, M.D.	Burlington	Medical Society	1967 to 1971
Ben W. Dawsey, D.V.M.	Gastonia	Gov. Dan Moore	1967 to 1971
Ernest A. Randleman, Jr., PhG.	Mount Airy	Gov. Dan Moore	1967 to 1971
Joseph S. Hiatt, Jr., M.D.	Southern Pines	Medical Society	1969 to 1973
Jesse H. Meredith, M.D.	Winston-Salem	Medical Society	1969 to 1973
Lenox D. Baker, M.D. (1)	Durham	Gov. Robert W. Scott	1969 to 1973
J. M. Lackey	Hiddenite	Gov. Robert W. Scott	1969 to 1973
Charles Barker, D.D.S.	New Bern	Gov. Robert W. Scott	1969 to 1973
James S. Raper, M.D.	Asheville	Medical Society	1971 to 1975
Paul F. Maness, M.D.	Burlington	Medical Society	1971 to 1975
Ralph W. Coonrad, M.D. (2)	Durham	Gov. Robert W. Scott	1971 to 1973

(1) Resigned when appointed Secretary, Department of Human Resources.

(2) Fill unexpired term Dr. Baker.

ROSTER OF MEMBERS OF BOARDS OF MEDICAL EXAMINERS

Name	Address	Term
Bryant L. Galusha, M.D., President	Charlotte	1968 to 1974
Charles B. Wilkerson, Jr., M.D., Secretary	Raleigh	1972 to 1978
Frank Edmondson, Jr., M.D.	Asheboro	1970 to 1976
Joseph W. Hooper, Jr., M.D.	Wilmington	1968 to 1974
Cornelius T. Partrick, M.D.	Washington	1968 to 1974
E. Wilson Staub, M.D.	Pinehurst	1972 to 1978
Vernon W. Taylor, Jr., M.D.	Elkin	1970 to 1976
Joseph J. Combs, M.D., Executive Secretary	Raleigh	

